SUMMARY OF NATIONAL TRANSPORTATION STATISTICS



NOVEMBER 1973

FINAL REPORT

DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22151.

Prepared for

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE SECRETARY
Assistant Secretary for Policy, Plans,
and International Affairs
Washington D C 20590

NOTICE The document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

Technical Report Documentation Page

					
1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.			
DOT-TSC-OST-73-36					
4. Title and Subtitle		5. Report Date			
SUMMARY OF NATIONAL TRANSPORTATION STATISTICS		November, 1973			
		6. Performing Organization Code			
		8. Performing Organization Report No.			
7. Author(s) Gill V. Hicks, Sherri Y. Shep	pard	DOT-TSC-OST-73-36			
9. Performing Organization Name and Add	ress	10. Work Unit No. (TRAIS)			
Department of Transportation		OP409/R4805			
Transportation Systems Cente	r	11. Contract or Grant No.			
Kendall Square Cambridge MA 02142		12 7 (2			
		13. Type of Report and Period Covered			
Sponsoring Agency Name and Address Department of Transportation		P. 12			
Office of the Secretary		Final Report			
Assistant Secretary for Policy Washington DC 20590	Plans and International Affairs	14. Sponsoring Agency Code			
6. Abstract					
This report is a compendium inventory, and performance modes: air carrier, general avia Published annually in Novem as operating revenues and expensive, etc. As its name implies, the report	of selected national-level transports data describing the passenger and cation, automobile, bus, truck, local truck, the report includes basic descriptorises, number of vehicles and employer is a summary of a larger data base, at and private statistical handbooks.	argo operations of the following ansit, rail, water, and oil pipeline. otors of U.S. transportation, such oyees, vehicle-miles and passenger consisting of time-series collected			
inventory, and performance modes: air carrier, general avia Published annually in Novem as operating revenues and expendies, etc. As its name implies, the report from a variety of government	data describing the passenger and cation, automobile, bus, truck, local truck, the report includes basic descriptenses, number of vehicles and employed is a summary of a larger data base, at and private statistical handbooks. In 1971.	argo operations of the following ansit, rail, water, and oil pipeline. otors of U.S. transportation, such oyees, vehicle-miles and passenger consisting of time-series collected In this edition, the selected data			
This report is a compendium inventory, and performance modes: air carrier, general avia Published annually in Novem as operating revenues and expendies, etc. As its name implies, the report from a variety of government cover the period 1961 through the cover the period 1961 through Statistics	data describing the passenger and cation, automobile, bus, truck, local truck, the report includes basic descripteness, number of vehicles and employed it is a summary of a larger data base, at and private statistical handbooks. In 1971. 18. Distribution State Document is National Tectors Springfield, National Tectors.	argo operations of the following ansit, rail, water, and oil pipeline. otors of U.S. transportation, such byees, vehicle-miles and passenger consisting of time-series collected In this edition, the selected data in this edition, the selected data are ement available to the public through the hnical Information Service, Virginia 22151.			
This report is a compendium inventory, and performance modes: air carrier, general avia Published annually in Novem as operating revenues and expendies, etc. As its name implies, the report from a variety of government cover the period 1961 through	data describing the passenger and cation, automobile, bus, truck, local truck, the report includes basic descripteness, number of vehicles and employer is a summary of a larger data base, at and private statistical handbooks. In 1971. 18. Distribution State Document is National Tect	argo operations of the following ansit, rail, water, and oil pipeline. otors of U.S. transportation, such oyees, vehicle-miles and passenger consisting of time-series collected In this edition, the selected data available to the public through the hnical Information Service,			

CONTENTS

		Page
Introduction		1
Figure 1.	Organization of the Data	5
Figure 2.	Modal Structure	6
Tree Displays		
Figure 3.	Expenditures and Revenues (\$ Millions) - 1971	8
Figure 4.	Vehicle Miles (Millions) - 1971	9
Figure 5.	Passenger Miles (Millions) - 1971	10
Figure 6.	Cargo Ton Miles (Millions) - 1971	11
Figure 7.	Number of Vehicles - 1971	12
Figure 8.	Number of Fatalities - 1971	13
Modal Profiles		
Air Carrier	Profile	17
General Av	riation Profile	20
Highway P	rofile	21
Automobil	e Profile	22
Bus Profile		24
Truck Prof	ïle	26
Local Tran	sit Profile	28
Water Tran	sport Profile	29
Rail Profile	e	32
Oil Pipeline	e Profile	34
Transportatio	n Trends	
Table 1.	Average Passenger Revenue Per Passenge-Mile (Cents), 1961 - 1971	37
Table 2.	Average Freight Revenue Per Ton-Mile (Cents), 1961 - 1971	38

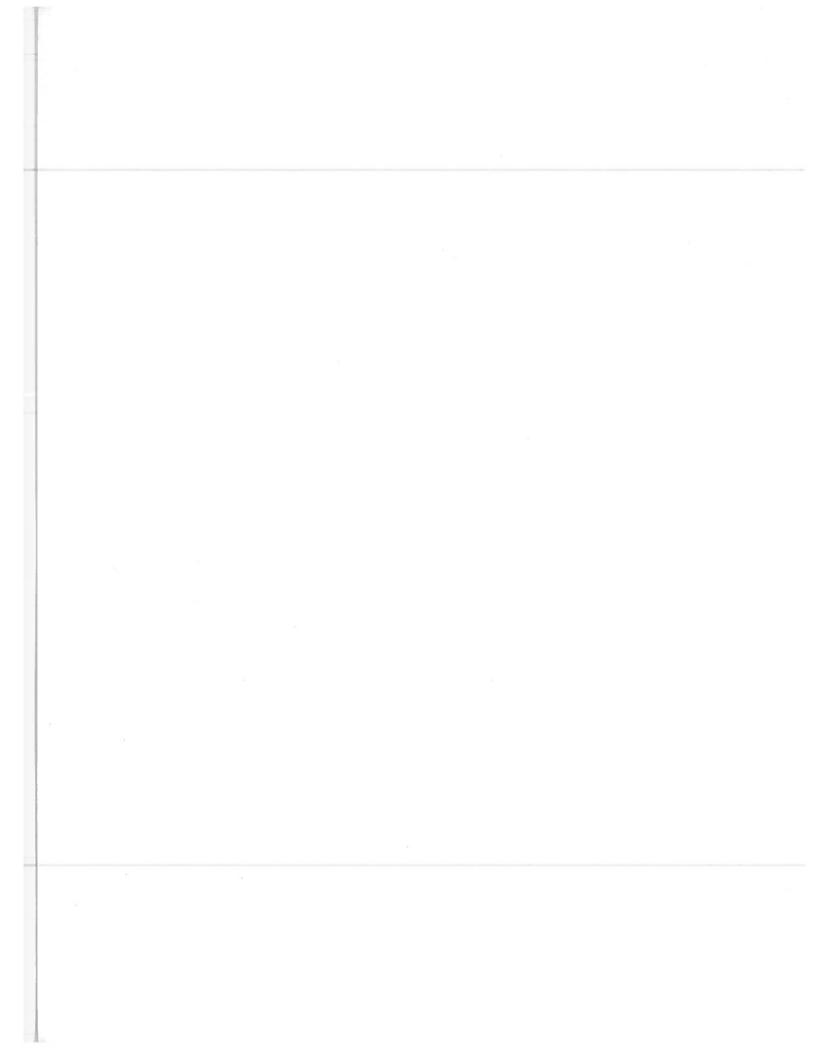
CONTENTS (Cont'd)

			Page
	Table 3.	Average Passenger Fare (Dollars), 1961 - 1971	39
	Table 4.	Total Operating Revenues (Millions of Dollars), 1961 - 1971	40
	Table 5.	Vehicle-Miles (Millions), 1961 - 1971	42
	Table 6.	Passenger-Miles (Millions), 1961 - 1971	44
	Table 7.	Cargo Ton-Miles (Millions), 1961 - 1971	46
	Table 8.	Basic Intercity Mileage within the Continental United States (Statute Mileage), 1961 - 1971	48
	Table 9.	Number of Vehicles, 1961 - 1971	49
Sı	upplementary	Data: Part 1: Transportation and the Economy	
	Table 10.	Personal Consumption Expenditures by Transportation Sector (Millions of Dollars), 1961 - 1971	53
	Table 11.	Personal Consumption Expenditures by Type of Product (Millions of Dollars), 1961 - 1971	55
	Table 12.	National Income by Transportation Sector (Millions of Dollars), 1961 - 1971	57
	Table 13.	Average Annual Earnings per Full-Time Employees by Transportation Sector (Dollars), 1961 - 1971	59
	Table 14.	Average Number of Full-Time and Part-Time Employees by Transportation Sector (Thousands), 1961 - 1971	60
	Table 15.	Wages and Salaries by Transportation Sector (Millions of Dollars), 1961 - 1971	61
S	upplementary	Data: Part 2: Transportation, Energy, and the Environment	
	Table 16.	Fuel Consumption by Mode, 1961 - 1971	65
A	ir Pollution		
	Figure 9.	Emissions of Carbon Monoxide by Automobiles in Urban Areas	66
	Figure 10.	Emissions of Hydrocarbons by Automobiles in Urban Areas	66
	Figure 11.	Emissions of Oxides of Nitrogen by Automobiles in Urban Areas	67

CONTENTS (Cont'd)

		Page
Water Pollutio	on .	
Table 17.	Geographical Distribution of the Frequency and Magnitude of 266 Tanker-polluting Incidents, 1969-1970	71
Table 18.	Area Location and Outflows of the 266 Tanker-polluting Incidents, 1969-1970	72
Table 19.	Outflows of 266 Tanker-polluting Incidents Shown by Type of Casualty and Area Locations, 1969-1970	73
Noise Pollutio	n	
Figure 12.	Typical Noise Levels	77
Figure 13.	Median Noise Level Estimates of Mixed Highway Traffic at 50 MPH	78
Figure 14.	Aircraft-Takeoff Noise Levels 3.5 NM from Brake Release	80
Figure 15.	Aircraft-Approach Noise Levels 1 NM from Threshold	80
Figure 16.	Aircraft Sideline Noise	81
Figure 17.	Wayside Noise Levels for Transit Trains of Various Lengths at 40 MPH	82
Appendix A.	Source Information	83
Appendix B.	Glossary	101
Appendix C.	Selected Passenger and Cargo Performance Indicators by Mode of Transportation, 1961 and 1971	113
Bibliography	••••••	121

INTRODUCTION



INTRODUCTION

The 1973 edition of the Summary of National Transportation Statistics is essentially an updated version of the 1972 edition, although some new tables and graphs have been added to the section called "Transportation, Energy, and the Environment".

Because of the growth in the demand for information on energy, we have recently published a compendium of energy supply and demand data in a separate report entitled $Energy\ Statistics-A$ Supplement to the Summary of National Transportation Statistics.

The statistical summaries in this document are of three types: (1) tree displays, (2) modal profiles, and (3) transportation trends. The data base from which the summaries have been drawn consists of time series covering the years 1961 - 1971.

Data summarization involves the selection of certain statistics from the data base and displaying them in such a fashion that comparisons of transportation measures and trends can be made with ease. The first step in this process is to place the selected data in a logical framework.

In general, the data can be divided into three main categories: cost, inventory, and performance. The following list indicates the type of data included in each group:

I. Cost

- A. Expenditures (private modes)
- B. Revenue (for-hire modes)
- C. Operating expenses
- D. Federal expenditures
- E. State and local expenditures

II. Inventory

- A. Number of companies
- B. Number of vehicles
- C. Number of employees
- D. Mileage

III. Performance

- A. Vehicle-miles
- B. Passenger-miles
- C. Number of passengers carried
- D. Ton-miles
- E. Tons of freight hauled
- F. Average passenger trip length
- G. Average length of freight haul
- H. Average speed
- I. Number of fatalities
- J. Number of fatal accidents
- K. Total number of accidents

As illustrated in figure 1, the data set can be described as cost, inventory, and performance statistics for each of the following major modal categories; highway, rail, air, water, pipeline, international air, and international water.

Figure 2 illustrates the detailed modal breakdown used in this report. The dotted lines indicate alternative groupings, e.g., "subway and elevated" can be considered a subset of both "local transit" and "rail."

The framework presented in figure 2 is flexible, for it reflects the structures of the various sources of transportation data. One should notice, for example, that the breakdown of the general aviation category comes from the Federal Aviation Administration Statistical Handbook of Aviation.

Tree Displays. Figure 2 provides the format for the tree displays. By placing numbers in the appropriate cells of the tree, it is possible to present one year's data for a given generalized measure for all modes of transportation. The following data are presented in tree format:

- A. Expenditures and revenues (1971)
- B. Vehicle-miles (1971)
- C. Passenger-miles (1971)
- D. Ton-miles (1971)
- E. Number of vehicles (1971)
- F. Fatalities (1971)

Some precision in definition is lost with this display technique, but the source information in the appendix attempts to qualify the statistics requiring further explanation.

Modal Profiles. A modal profile lists the most recent cost, inventory, and performance data available in the data base for a given mode. It is important to note that not all of the measures listed on page 1 are available for each mode, nor are they always applicable. This is clearly illustrated by the difference in the type and amount of data recorded for air carrier and oil pipeline.

Our intent was to provide 1961 and 1971 values for each measure. In some instances the 1971 value is not available, and either the 1970 or most recent value is listed instead.

Transportation Trends. Included in these tables are annual data from 1961 to 1971. A variety of cost, inventory, and performance items are represented in this section.

Supplementary Data. There has been a growing demand for data that relate transportation to the overall economy and the environment. This report touches on some of the major topics, such as national income derived from transportation, oil pollution from tanker accidents, and noise pollution from transportation sources.

Source Information and Glossary of Terms. Appendix A is a detailed listing of the sources of data contained in this document. A special footnote system has been devised for the tree displays (fig. 3-8). In figure 3, for example, the "local transit" cell contains the standard reference number (19) in the upper right-hand corner. In appendix A under figure 3 we find the number (19), after which the source of the local transit datum is given.

Feeling that the usefulness of transportation data depends greatly on clarity of definition, we have included in appendix B a glossary of terms. This section is organized by mode and has been assembled from existing glossaries, such as that in the Civil Aeronautics Board *Handbook of Airline Statistics*. The lack of comparable glossaries in other statistical handbooks makes it difficult to prepare a complete dictionary.

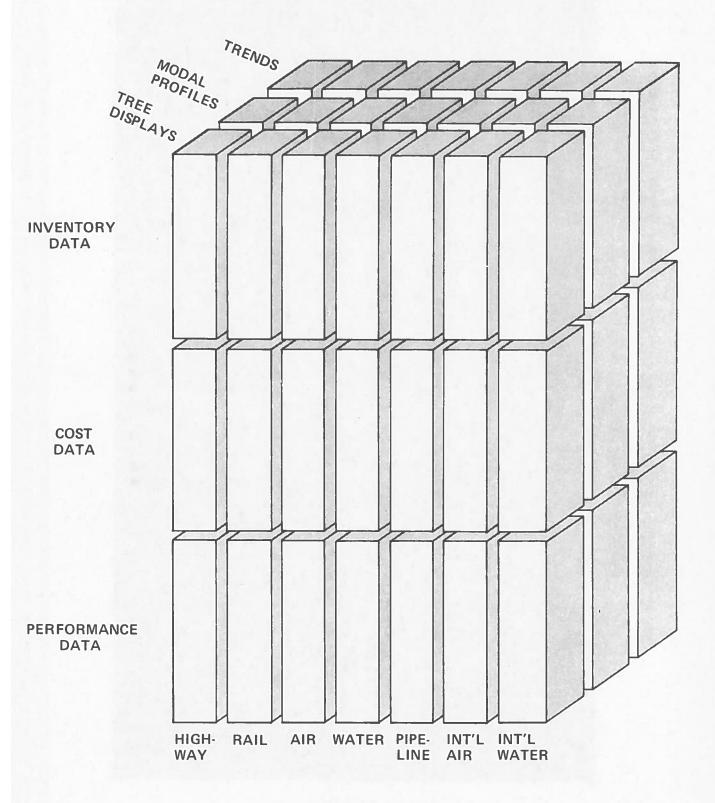


Figure 1. Organization of the Data

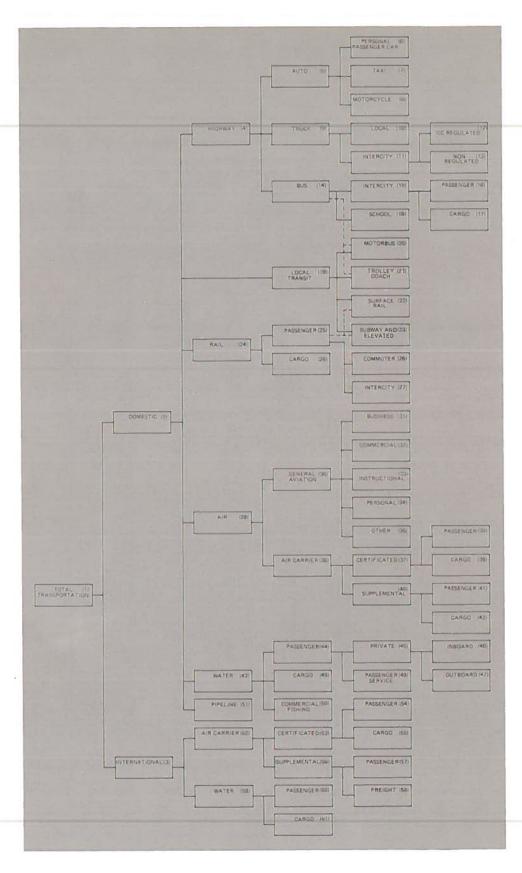


Figure 2. Modal Structure

TREE DISPLAYS

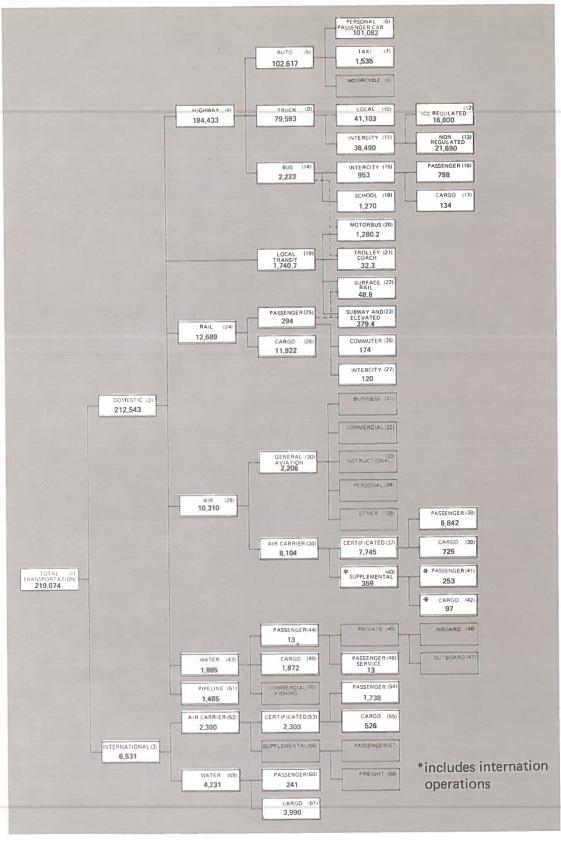


Figure 3. Expenditures & Revenues (\$ Millions) - 1971

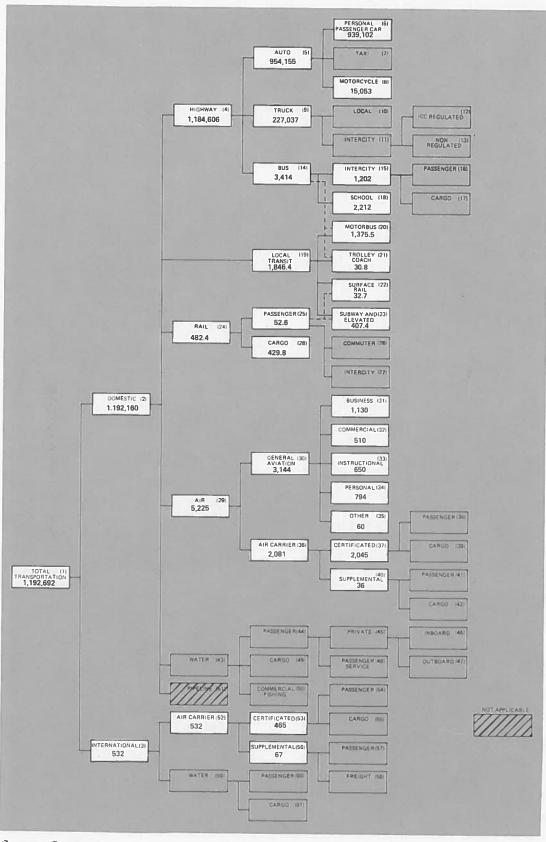


Figure 4. Vehicle Miles (Millions) - 1971

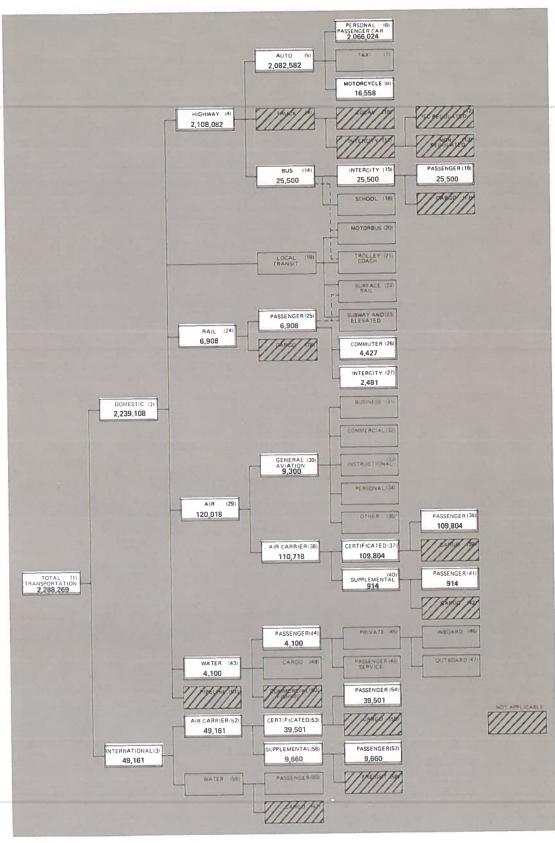


Figure 5. Passenger Miles (Millions) - 1971

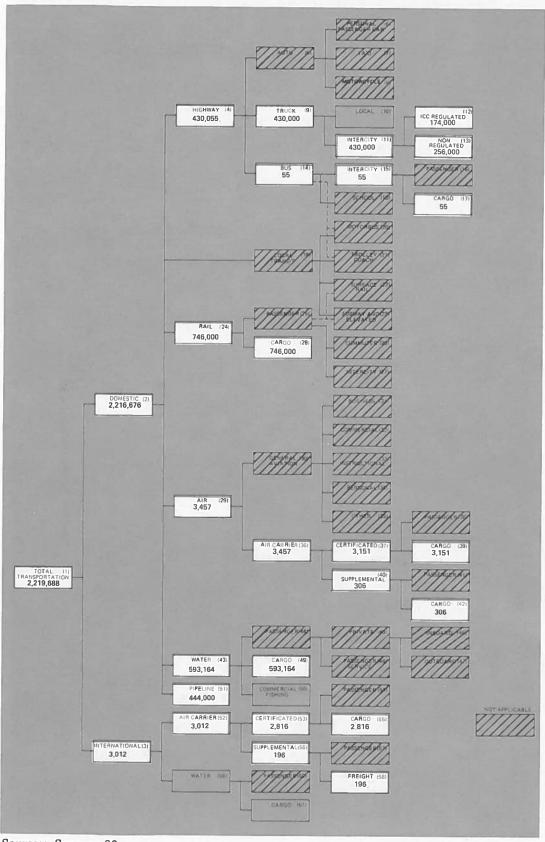


Figure 6. Cargo Ton Miles (Millions) - 1971

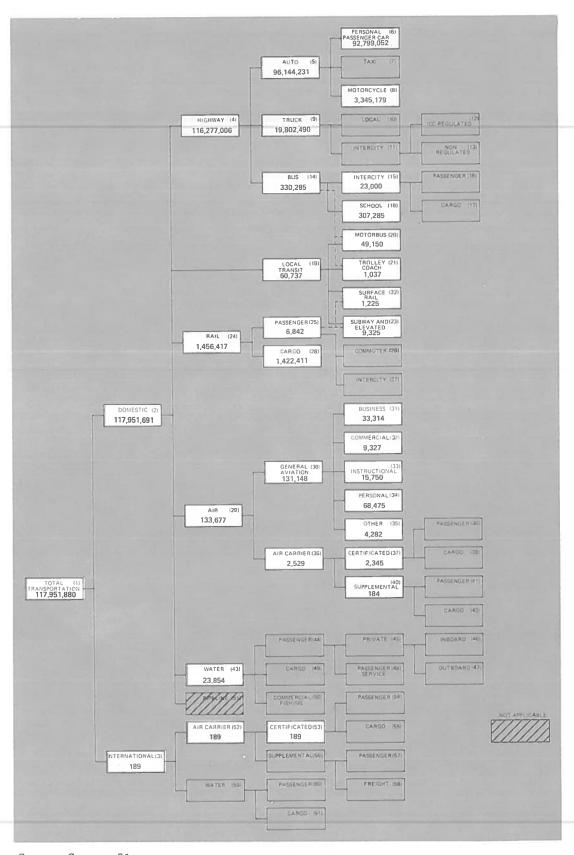


Figure 7. Number of Vehicles - 1971

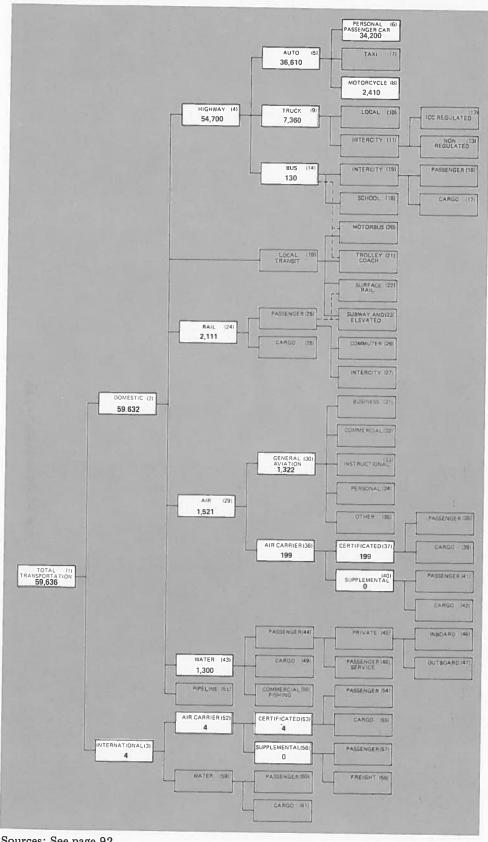


Figure 8. Number of Fatalities - 1971

MODAL PROFILES

AIR CARRIER PROFILE

I. COST	1961	1971	% Change
Operating Revenues (\$millions)			
Certificated carriers, domestic operations			
Transport revenues	2,214.1	7,541.4	+241
Nontransport revenues	90.8	152.1	+68
Total operating revenues	2,304.9	7,693.5	+234
Certificated carriers, international operations	2,001.0	1,000.0	1204
Transport revenues	744.3	2,267.7	+205
Nontransport revenues	14.4	32.6	+126
Total operating revenues	758.7	2,300.3	+203
Supplemental carriers, domestic plus	100.1	2,000.0	1200
international operations			
Transport revenues	80.7	349.8	+333
Nontransport revenues	n/a	9.8	
Total operating revenues	n/a n/a	359.6	n/a
Total operating revenues	II/a	359.0	n/a
Operating Expenses (\$millions)			
Certificated carriers, domestics operations	2,306.9	7 500 6	1005
Certificated carriers, domestics operations Certificated carriers, international operations	736.6	7,500.6	+225
Supplemental carriers, domestic plus international	130.0	2,213.6	+201
operations	85.3	220 7	1000
Operations	00.0	330.7	+288
II. INVENTORY			
Number of Carriers			
Domestic and international			
Certificated	53	37	-30
Supplemental	133	12	-91
			01
Number of Aircraft Available for Service			
Domestic and international			
Certificated, all services	2,034	2,534	+25
Supplemental	182	184	+1
Number of Employees			
Domestic			
Certificated, all services	138,965	244,806	+76
Supplemental ¹	1,803	5,229	+190
International	_,_ 0	,	
Certificated, all services	172,261	298,402	+73
	,,_	200,102	

AIR CARRIER PROFILE (cont.)

III. PERFORMANCE	<u>1961</u>	<u>1971</u> <u>%</u>	Change
Aircraft Revenue-Miles (millions) Domestic			
Certificated, all services	832.8	2,041.8	+145
Scheduled service	802.4	1,999.5	+149
Nonscheduled service	30.4	42.2	+39
Supplemental	n/a	35.5	n/a
International			. 1 40
Certificated, all services	184.4	458.1	+148
Scheduled service	167.3	376.3	+125
Nonscheduled service	17.1	81.9	+379
Supplemental	n/a	67.2	n/a
Total	n/a	2,602.6	n/a
Revenue Passenger-Miles (millions)			
Domestic	31,616.9	109,803.9	+247
Certificated, all services Scheduled service	31,062.3	106,438.4	+243
Nonscheduled service	554.6	3,365.5	+507
Supplemental	n/a	914.0	n/a
International			
Certificated, all services	10,173.7	39,501.3	+288
Scheduled service	8,768.5	29,219.2	+233
Nonscheduled service	1,405.2	$10,\!282.1$	+632
Supplemental	n/a	9,659.7	n/a
Total	n/a	159,878.9	n/a
Revenue Passenger Load Factor (%)			
Domestic and international			
Certificate scheduled service	55.6	50.1	-9
Domestic			
Certificated scheduled service	55.4	48.5	-12
Revenue Ton-Miles of Freight ¹ (millions)			
Domestic	0540	0.050.0	1960
Certificated, all services	654.9	2,356.8	+260 +364
Scheduled service	472.6	2,192.9 163.9	
Nonscheduled service	182.3	295.5	
Supplemental	n/a	299.0	11/a
International	907 1	2,197.1	+615
Certificated, all services	307.1 260.3	2,197.1 1,519.3	
Scheduled service			+1,348
Nonscheduled service	46.8	178.8	
Supplemental	113.9	T10.0	

AIR CARRIER PROFILE (cont.)

	1961	<u>1971</u>	% Change
Average Overall Airborne Speed (mph)			
Domestic			
Certificated, scheduled service	252	407	+62
International			
Certificated, scheduled service	351	482	+37
Total Number of Accidents			
Domestic			
Certificated, scheduled service	56	33	-41
Domestic and international			
Certificated, all services	78	8	-90
Supplemental	6	1	-83
Number of Fatalities			
Domestic and international			
Certificated, all services			
Passengers	124	174	+40
Crew	24	14	+42
Others	1	6	+500
Total	149	194	+30
Supplemental			
Passengers	151	0	-100
Crew	11	0	-100
Others	0	0	-0
Total	162	0	-100

n/a = not available

Sources: Civil Aeronautics Board, Handbook of Airline Statistics, 1969, 1971.
Civil Aeronautics Board, Air Carrier Traffic Statistics, December, 1971.
Civil Aeronautics Board, Air Carrier Financial Statistics, December, 1971.
National Safety Council, Accident Facts, 1972.

¹ Excludes ton-miles of express, mail, and excess baggage.

GENERAL AVIATION PROFILE

I. COST	<u>1961</u>	1971	% Change
Expenditures (\$millions) Total	929 166	2,206 429	+137 +158
Aircraft Operating costs	763	1,777	+133
II. INVENTORY			
Number of Eligible Aircraft Total	80,632	131,148	+63
III. PERFORMANCE	·		
Number of Miles Flown (millions)	0055	1 100	4 .07
Business	887.7	1,130.4 510.0	
Commercial	332.9 203.4	650.0	
Instructional Personal	425.3	794.0	
Other	8.6	59.	
Total -	1,857.9	3,143.9	
NI have of II arms Florens (mailtions)			
Number of Hours Flown (millions) Business	5.7	7.3	1 +25
Commercial	2.6	3.5	_
Instructional	1.8	6.4	
Personal	3.4	7.5	2 +112
Other	.1	•4	4 +300
Total	13.6	24.	6 +81
Number of Fatalities	E04	1 000	. 77.4
Total	761	1,322	+74

Sources: Federal Aviation Administration, Statistical Handbook of Aviation, 1971.
Transportation Association of America, Transportation Facts and Trends, 1971.
National Safety Council, Accident Facts, 1971.

HIGHWAY PROFILE

I. COST	1960	1971	% Change
Government Expenditures (\$millions)			
Federal	2,753	5,624	.104
State and local	8,009	16,880	+104
Total	10,762	22,504	+111 +109
II. INVENTORY	1961	1071	
	1301	<u>1971</u>	
Rural Mileage			
Under State control			
State primary system	406,199	408,332	
State secondary roads	242,925	274,399	+1
Other State roads	16,132	30,054	+13
Total	665,256	712,785	+86
Under local control	000,200	112,100	+7
County roads	1,731,514	1,726,603	-0
Town and township roads	549,169	497,902	-9
Other local roads	65,463	31,766	
Total	2,346,146	2,256,271	-51 -4
Under Federal control	115,823	196,839	+70
Municipal Mileage	220,020	100,000	770
Under State control			
Extensions of State primary system	43,857	61,060	+39
Extensions of State secondary roads	9,708	16,326	+68
Total	53,565	77,386	+44
Under local control	00,000	11,000	744
Local city streets	392,256	515,661	101
Total municipal mileage	445,821	593,047	+31 +33
Total Rural and Municipal Mileage	3,573,046	3,758,942	+5

Sources: Federal Highway Administration, Highway Statistics, 1971, 1961.

AUTOMOBILE PROFILE

I. COST	1961	<u>1971</u>	% Change
Expenditures (\$millions)	10 100	41,659	+130
New and used cars	18,120		+168
Tires, tubes, accessories	2,859	7,653	+89
Gasoline and oil	14,572	27,601	
Tolls	371	712	+92
Insurance	2,400	4,518	+88
Interest on debt	2,740	5,680	+107
Auto registration fees	892	1,737	+95
Operator's permit fees	122	223	+83
Retail, greasing, washing, parking, storage, rental	5,851	11,299	+93
Total	47,927	101,082	+111
Total			
Revenues (\$millions)	200	1 505	: 01
Taxi	803	1,535	+91
II. INVENTORY			
Number of Vehicle Registrations			
Passenger cars and taxis	63,275,499		+47
Motorcycles	595,669	3,345,179	+462
141010103 0100			
Number of Employees			
Taxis	114,300	105,100	-8
1 6/24			
III. PERFORMANCE			
77.1: 1. 3/21 (millions)1			
Vehicle-Miles (millions) ¹	294,191	525,212	+79
Urban streets	234,516		+38
Main rural roads	80,246	•	+30
Local rural roads	608,953		+57
Total travel	000,000	0.00,000	
Vehicle-Miles (millions)			
Motorcycles	n/a		n/a
Passenger car and taxis	604,557		+55
Total	n/a	954,155	n/a
. Ovu			
Passenger-Miles (millions) ²		0.000.004	20/0
Total travel, passenger cars and taxis	n/a	2,066,024	n/a
• •			

AUTOMOBILE PROFILE (cont.)

	<u>1961</u>	1971	% Change
Average Speed (mph), Main Rural Roads ³			
Passenger cars	51	62	+22
Number of Vehicles in All Accidents			
Motorcycles	100,000	300,000	+200
Passenger car		23,000,000	+44
Taxis	150,000	190,000	+27
Number of Vehicles in Fatal Accidents			
Motorcycles	600	9 200	1000
Passenger cars	36,500	2,300 51,300	+283 +41
Taxis	150	230	+53
Number of Passenger Fatalities, Passenger Cars			
and Taxis	24,700	34,200	+39
Number of Fatalities, Motorcycle Drivers,			
plus Passengers	697	2,410	+246

n/a = not available

Sources: Federal Highway Administration, Highway Statistics, 1971, 1961. Transportation Association of America, Transportation Facts and Trends, 1972. National Safety Council, Accident Facts, 1972.

 ¹ Includes passenger cars, taxis and motorcycles.
 ² Based on vehicle-mile data from the Federal Highway Administration, Department of Transportation, and an average occupancy of 2.2.
 ³ Speed of free-flowing traffic along level sections of highway.

BUS PROFILE

I. COST	<u>1961</u>	<u>1971</u>	% Chance
Expenditures (\$millions) School bus	530	1,270	+140
Operating Revenues (\$millions) Intercity bus, Total Intercity bus, Class 1	571.0 484.5	954.1 759.3	+67 +57
Operating Expenses (\$millions) Intercity bus, Total Intercity bus, Class 1	505.2 422.6	852.5 665.1	+69 +57
Taxes Assignable to Operations (\$millions) ¹ Intercity bus, Total Intercity bus, Class 1	54.2 37.5	79.0 51.6	+46 +38
II. INVENTORY			
Number of Operating Companies Intercity bus	1,100	1,000	-9
Number of Vehicles Intercity bus	20,490	23,300	+14
Number of Employees of Operating Companies Intercity bus	45,000	49,600	+10
Miles of Highway Served Intercity	260,000	268,000	+3
III. PERFORMANCE			
Vehicle-Miles (millions) Commercial bus² Urban streets Main rural roads Local rural roads Total travel	1,812 878 156 2,846	1,767 925 193 2,885	-2 +5 +24 +1

BUS PROFILE (cont.)

	<u>1961</u>	1971	% Change
School and nonrevenue bus			
Urban streets	259	429	+66
Main rural roads	627	825	+32
Local rural roads	664	958	+44
Total travel	1,550	2,212	
All buses	1,000	2,212	+43
Urban streets	2,071	2,196	+6
Main rural roads	1,505	1,750	+16
Local rural roads	820	1,151	+40
Total travel	4,396	5,097	+16
Revenue Passenger Miles (millions)			
Intercity bus, total	20,300	25 500	.00
Intercity bus, Class 1 ³	13,771	25,500	+26
	10,771	14,190	+3
Number of Revenue Passengers (millions)			
Intercity bus, total	358	398	+11
Intercity bus, Class 1	260	168	-35
Average Speed (mph)			
Commercial bus, main rural roads ⁴	55	60	+9

¹ Excludes income taxes.

Sources: National Association of Motorbus Owners, Bus Facts, 1972. Federal Highway Administration, Highway Statistics, 1971, 1961.

Transportation Association of America, Transportation Facts and Trends, 1972.

² Includes income taxes.

² Includes local transit buses. See "Local Transit Profile" for more detailed information on urban bus transportation.

³ Regular-route intercity service. Excludes local, suburban charter, and special service.

⁴ Speed of free-flowing traffic along level sections of highway.

TRUCK PROFILE

I. COST	<u>1961</u>	1971	% Change
Revenues (\$millions) Local	15,147	41,103	+171
Intercity ICC-regulated Non-ICC-regulated	7,463 11,664	16,800 21,690	+125 +86
Operating Revenues of Class I Intercity Motor Carriers (\$millions) Freight, intercity, common Freight, intercity, contract Freight, local Trans. for other Classes I and II carriers Other Total	4,599.8 188.1 56.4 48.4 44.7 4,937.4	12,004.2 391.3 513.5 120.0 138.6 13,167.6	+148
Operating Expenses of Class I Intercity Motor Carriers (\$millions)	4,230.3	12,378.5	+193
II. INVENTORY			
Number of Truck Registrations Private and commercial Federal State, county, municipal Total	11,669,225 89,055 533,085 12,291,365	18,805,323 154,864 842,303 19,802,490	+74 +58
Number of Employees Total Truck drivers and delivery men	8,000,000	8,800,000	+10
Number of Companies, Class I Intercity Carriers	965	1,398	3 +45
Number of Employees, Class I intercity Carriers	304,895	506,765	+66
III. PERFORMANCE			
Vehicle-Miles (millions) Urban streets Main rural roads Local rural roads Total travel	45,442 62,679 20,461 128,582	85,56 109,38 32,08 227,03	1 +75 9 +57

TRUCK PROFILE (cont.)

	1961	1971	% Change
Ton-Miles (millions) Intercity	296,000	430,000	+45
Average Speed, Main Rural Highways (mph) ¹ All trucks	47	56	+19
Average Length of Haul (miles) Class I intercity motor carriers			
Common	267	264	-1

¹ Speed of free-flowing traffic along level sections of highway.

Sources: Federal Highway Administration, Highway Statistics, 1971, 1961.
Interstate Commerce Commission, 86th Annual Report to Congress, 1972;
76th Annual Report to Congress, 1962. Transportation Association of America, Transportation Facts and Trends, 1972.

LOCAL TRANSIT PROFILE

I. COST	<u>1961</u>	<u>1971</u>	% Change
Passenger Revenue (\$millions)	007.0	1 006 9	+37
Motorbus	897.8	1,226.8	+33
Subway and elevated	273.5	363.8	
Surface rail	73.1	40.1	-45
Trolley coach	76.5	31.2	-59
	1,320.9	1,661.9	+26
Total	_,	,	
Or mating Personne (Smillions)			
Operating Revenue (\$millions)	945.4	1,280.2	+35
Motorbus	285.7	379.4	+33
Subway and elevated	79.9	48.8	-39
Surface rail		32.3	-59
Trolley coach	78.7		+25
Total	1,389.7	1,740.7	+∠0
Operating Expenses (\$millions)			
Total local transit	1,295,770	2,040,453	+57
Total local transit	2,200,000	_, ,	
II. INVENTORY			
Number of Companies			
Electric railways ¹	18	15	-17
Motorbus	1,217	1,046	-14
	12	12	-0
Trolley coach and Motorbus			
Number of Vehicles			
Motorbus	49,000	49,150	-0
	9,078	9,325	+3
Subway and elevated	2,341	1,225	-48
Surface rail	3,593	1,037	-71
Trolley coach	3,330	1,001	
Number of Employees			
Motorbus, surface rail, trolley coach,			129
subway and elevated	151,800	139,120	-8
subway and elevated	,		
III. PERFORMANCE			
Revenue Vehicle-Miles (millions)			10
Motorbus	1,529.7	1,375.5	
Subway and elevated	385.1		
	69.4	32.7	-53
Surface rail	92.9		-67
Trolley coach	2,077.1		
Total	2,011.1	1,010.	
Revenue Passengers Carried (millions)		0.770	0.0
Motorbus	4,834	3,579	-26
Subway and elevated	1,680	1,494	-11
Surface rail	323	155	-52
	405	113	-72
Trolley coach	7,242	5,341	-26
Total	.,2	-,	

¹ Includes surface rail and subway and elevated.

Sources: American Transit Association, Transit Fact Book, 1972-73.

WATER TRANSPORT PROFILE

I. COST	1961	1971	% Change
Revenues (\$millions)			
Domestic freight			
Coastal waterways	1,517	1,812	-19
Inland waterways	722	752	+4
Great Lakes	309	525	+70
Locks, channels, etc.	188	210	+12
International freight	298	385	+29
Domestic passenger, intercity	1,699	3,990	+135
International passenger ¹	14	13	-7
memanonai passenger	240	241	-0
Revenue of Classes A and B Carriers by Inland and Coastal Waterways (\$millions)			
Line service operating revenues			
Freight	184.4	302.7	
Passenger	8.0	13.2	+64
Other	2.7		+65
Other operating revenue	3.1	12.3	+35
Revenue from terminal operations	20.2	3.0	-3
Rent and motor carrier revenue	14.8	28.8	+43
Total waterline operating revenues	233.2	33.0	+123
	255.2	393.0	+60
Revenues of Maritime Carriers (\$millions)			
Coastwise and intercoastal service	105	0.0	
Charter	23	82	+22
Total vessel operating revenues	439	61	+42
Total waterline operating revenues	505	681	+55
Operating Expenses of Classes A and B	505	748	+48
Carriers by Inland and Intracoastal			
Waterways (\$millions)	329.1	347.0	. =
	020.1	047.0	+5
Operating Expenses of Maritime Carriers (\$millions)	494.4	727.6	+47
Government Expenditures (\$millions)			
Federal expenditures			
Coast Guard	276	015	
Merchant Marine	282	617	+123
Total waterways		437	+55
Inland and intracoastal waterways	300	408	+36
State and local expenditures	161	218	+36
Coast Guard plus Merchant Marine	909	500	7
- International Control of the Contr	293	500	+71

WATER TRANSPORT PROFILE (cont.)

II. INVENTORY	<u>1961</u>	<u>1971</u>	% Change
Number of Companies, Classes A and B Carriers by Inland and Coastal Waterways	101	74	-27
Number of Companies, Maritime Carriers	26	17	-35
Number of Employees Ships, boat building, and repairs Transportation services	142,000 304,000	169,000 308,300	+19 +1
Number of Employees Maritime carriers	n/a	10,400	n/a
Classes A and B carriers by inland and coastal waterways	n/a	8,364	n/a
Mileage of Commercially Navigable Inland Channels	25,260	25,543	+1
Number of Vessels Total non-self-propelled Dry cargo barges and scows Tank barges Self-propelled towboats and tugs	16,505 14,058 2,447 4,052	19,624 16,439 3,185 4,230	+19 +17 +30 +4
III. PERFORMANCE			
Passenger-Miles, Intercity (millions)	2,300 <u>1962</u>	4,000 <u>1971</u>	+74
Ton-Miles (millions) Domestic water freight Coastwise Internal Lakewise Local Total	317,636 89,614 65,990 1,730 474,969	360,205 161,339 70,281 1,239 593,164	+13 +80 +7 -28 +25
	<u>1961</u>	<u>1971</u>	
Ton-Miles, Domestic Deep Sea (billions)	253	250	-1
Tons of Freight Hauled (millions)	1962	<u>1971</u>	
Domestic water Coastwise Internal Lakewise Local Total	215 316 136 102 769	243 479 141 81 944	+13 +52 +4 -21 +23
n/a = not available			

WATER TRANSPORT PROFILE (cont.)

	1962	1971	% Change
Exports (millions of tons)			
Great Lakes ports	0.5		
Coastal ports	25	33	+32
Total	110	173	+57
Imports (millions of tons)	135	206	+53
Great Lakes	15		
Coastal ports	15	26	+73
Total	207	334	+61
	222	360	+62
	<u>1961</u>	1971	
Tons of Freight introducit at 1 ()			
Tons of Freight, intraterritorial (millions)	1.0	1.5	+50
	1962	1971	
Average Haul, Doraestic System (miles-per-ton)	617.2	000 4	
Coastwise	1,474.2	628.1	+2
Internal	283.5	1,482,8	+1
Lakewise	486.1	336.7	+19
Local	16.9	449.3	-8
	10.9	15.2	-10
	1961	1971	
Cargo Capacity (net tons)			
Total non-self-propelled vessels	10 055 055		
Dry cargo barges and scows	16,355,657	24,602,312	+50
Tank barges	12,147,006	18,272,014	+50
	4,208,651	6,330,298	+50
Number of Fatalities in Water Transport	1,100	1,300	+18

¹ Revenues paid by American travelers to U.S. and foreign flag carriers.

Sources: American Waterways Operators, Inland Waterborne Commerce Statistics, 1971.

U.S. Army Corps of Engineers, Waterborne Commerce Statistics of the United States, 1971,
Part V. Transportation Association of America, Transportation Facts and Trends, 1972, and
quarterly supplement January, 1973. Association of American Railroads, Government Expenditures
for Transport Facilities, 1972. Interstate Commerce Commission, 86th Annual Report to Congress,
1972; Interstate Commerce Commission, 76th Annual Report to Congress, 1962. National Safety
Council, Accident Facts, 1972.

RAIL PROFILE

I. COST	1961	<u>1971</u>	% Change
Revenues, Class I Line-Haul Railroads (\$millions)	624.4	293.9	-53
Passenger	126.9	173.6	+37
Commutation	497.5	120.3	-76
Other than commutation	7,739.0	11,785.9	+52
Freight	341.7	126.0	-63
Mail	83.0	10.5	-87
Express	400.6	475.5	+19
Other		12,691.8	+38
Total operating revenues	9,188.7	12,091.0	. 00
Operating Expenses, Class I Line-Haul Railroads (\$millions)	7,274.3	10,234.8	+41
II. INVENTORY			
Number of Vehicles, Class I Railroads			
Freight-carrying cars	1,604,241	L,422,411	-11
Passenger and pullman cars	26,705	7,505	-72
	28,815	27,164	-6
Locomotives	,		
Number of Companies, Class I Railroads	n/a	71	n/a
Number of Employees, Class I Railroads	717,543	544,497	-24
Line Mileage, All Line-Haul Railroads	217,445	205,000	-6
III. PERFORMANCE			
Car Mileage, Class I Railroads (millions)	27,226	29,184	+7
Freight		353	-83
Passenger	2,083	550	
Train Mileage, Class I Railroads (millions)	Y	FO 0	70
Passenger	198.4		-73
Freight	386.4	429.8	+11
Locomotive Mileage, Class I Railroads (millions) ¹			
Freight	401.7		+219
	178.6	61.4	-66
Passenger	580.3		+131
Total		•	
n/a = not available			

RAIL PROFILE (cont.)

	<u>1961</u>	1971	% Change
Revenue Passengers Carried, Class I Railroads			
(millions) ¹			
Commutation	198	199	+1
Other passenger	118	63	-47
Revenue Passenger-Miles, Class I Railroads (millions) ¹			
Commutation	4,132.3	4,426.8	+7
Other passenger	16,154.1	2,480.7	-85
Average Passenger Trip Length, Class I Railroads (miles)			
Commutation	21	22	+5
Other passenger	137	40	-71
Revenue Ton-Miles, Class I Railroads (millions)			
Freight	563,361	739,743	+31
Average Haul, Class I Railroads (miles)			
Freight	257	301	+17
Number of Fatalities, All Railroads			
Passengers on trains	20	17	-15
Employees on duty	167	134	-20
Other nontrespassers	1,425	1,396	-2
Trespassers	653	564	-14
Total	2,265	2,111	-7
	, 5	-,	

¹ Excludes Amtrak operations

Sources: Association of American Railroads, Statistics of Railroads of Class I, 1971. Association of American Railroads, Yearbook of Railroad Facts, 1972. National Safety Council, Accident Facts, 1972.

OIL PIPELINE PROFILE

I. COST		1961	<u>1971</u>	% Change
Operating Revenues (\$millions) ICC-regulated Non-regulated Total		787 127 914	1,247 238 1,485	+58 +87 +62
Operating Expenses (\$millions) ICC-regulated	e e	419.9	712.2	+70
Taxes, ICC-regulated Companies Federal Other	s (\$millions)	111.4 40.9	135.0 85.3	+21 +109
II. INVENTORY				
Number of ICC-regulated Comp	anies	89	99	+11
Number of Employees, ICC-regu	ulated Companies	20,295	14,787	-27
		<u>1961</u>	1970	
Mileage ¹		200,543	218,604	+9
III. PERFORMANCE		<u>1961</u>	1971	
Intercity Ton-Miles (millions) ICC-regulated Non-regulated Total		205,400 32,300 277,700	378,000 66,000 444,000	+84 +104 +60
Tons Transported (millions) Crude petroleum Petroleum products Total		333 151 484	n/a n/a 806	n/a n/a +67

¹ Regulated plus unregulated mileage of crude oil trunk and gathering lines, plus refined oil trunk lines.

Sources: American petroleum Institute, Petroleum Facts and Figures, 1971.

Transportation Association of America, Transportation Facts and Trends, 1972.

Interstate Commerce Commission, 86th Annual Report to Congress, 1972;

Interstate Commerce Commission, 76th Annual Report to Congress, 1962.

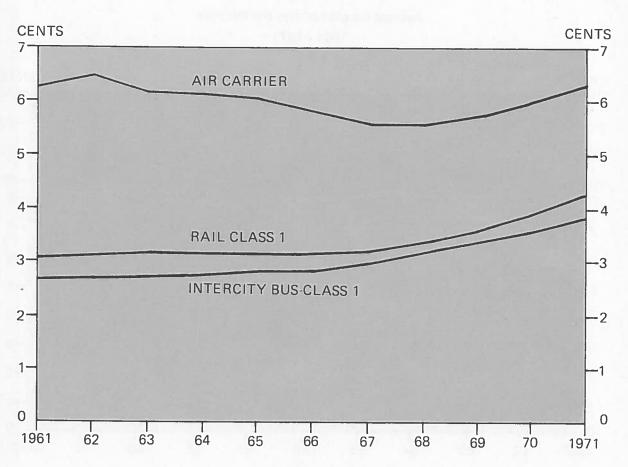
n/a = not available

TRANSPORTATION TRENDS

Table 1. Average Passenger Revenue Per Passenger-Mile, 1961 - 1971 (Cents)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Certificated air carrier											
domestic operations ¹					46.00						
Total	6.28	6.45	6.17	6.12	6.06	5.83	5.64	5.61	5.79	6.00	6.32
First class	7.34	7.57	7.17	7.26	7.33	7.24	7.24	7.33	7.78	8.30	8.58
Coach plus economy	5.42	5.76	5.62	5.58	5.52	5.28	5.13	5.11	5.27	5.45	5.82
Class I rail ²											
Total	3.08	3.11	3.18	3.17	3.18	3.18	3.20	3.39	3.61	3.92	4.25
Commutation	3.07	3.13	3.17	3.20	3.30	3.33	3.36	3.49	3.55	3.75	3.92
Other than commutation	3.08	3.10	3.18	3.16	3.14	3.13	3.13	3.33	3.63	4.02	4.85
Class I intercity bus ³	2.69	2.67	2.78	2.80	2.88	2.89	2.98	3.18	3.39	3.60	3.83

Average passenger revenue per passenger-mile 1961 - 1971



Scheduled service.
 Excludes Amtrak service.
 Regular route intercity service.
 Sources: See page 93.

Table 2. Average Freight Revenue Per Ton-Mile, 1961 - 1971 (Cents)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Air carrier certificated, domestic operations, scheduled service	22.08	21.31	21.72	20.97	20.46	20.21	19.90	19.97	21.03	21.91	22.59
Class I rail	1.37	1.35	1.31	1.28	1.27	1.26	1.27	1.31	1.35	1.43	1.59
Class I intercity motor carriers of property ¹ Common Contract	6.30 7.23	6.41 7.29	6.38 7.13	6.66 7.85	6.46 7.66	6.34 7.31	6.65 7.36	6.93 7.23	7.21 7.35	7.46 6.85	7.85 7.20
Oil pipelines	0.32	0.32	0.32	0.30	0.28	0.27	0.26	0.26	0.27	0.27	0.29
Class A and B water carriers, barge lines operating on Mississippi River and tributaries	n/a	n/a	n/a	0.36	0.35	0.33	0.30	0.31	0.29	0.30	0.34

¹ Intercity service. Sources: See page 94.

Average freight revenue per ton-mile 1961 - 1971

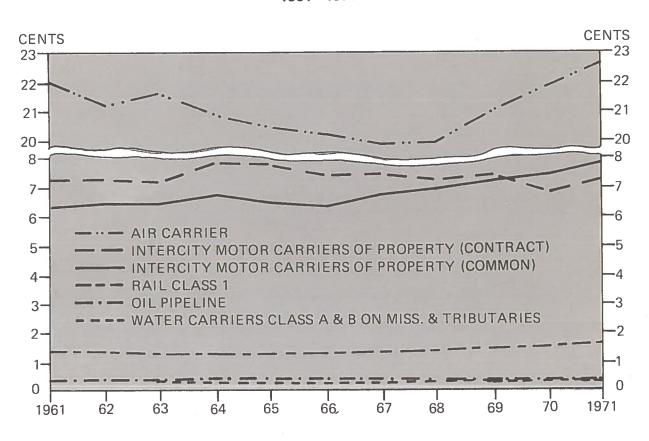


Table 3. Average Passenger Fare, 1961 - 1971 (Dollars)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Air carrier Certificated domestic operations scheduled service	34.30	35.68	34.22	34.13	34.12	33.40	33.15	33.70	37.52	40.71	43.08
Class I bus, intercity ¹	2.20	2.43	2.52	2.55	2.73	2.71	2.79	2.91	3.55	3.81	4.19
Local transit Railway Surface rail Subway and elevated Total Trolley coach Motor bus Grand total	0.23 .16 .17 .19 .18	0.23 .16 .17 .20 .19	0.23 .16 .17 .21 .20	0.23 .17 .17 .21 .20 .19	0.24 .17 .17 .22 .21	0.24 .19 .19 .22 .21	0.23 .21 .21 .22 .22	0.24 .21 .21 .23 .23 .23	0.25 .22 .22 .23 .26 .25	0.27 .23 .24 .24 .29 .28	0.26 .24 .24 .28 .32 .30
Class I rail Other than commutation Commutation	4.21 .64	4.20 .65	4.00 .67	3.86 .68	3.92 .71	3.83 .72	3.48 .72	3.16 .75	3.15 .78	3.19 .84	1.91 ² .87 ²

Intercity regular route service
 Excludes AMTRAK service.
 Sources: See page 94.



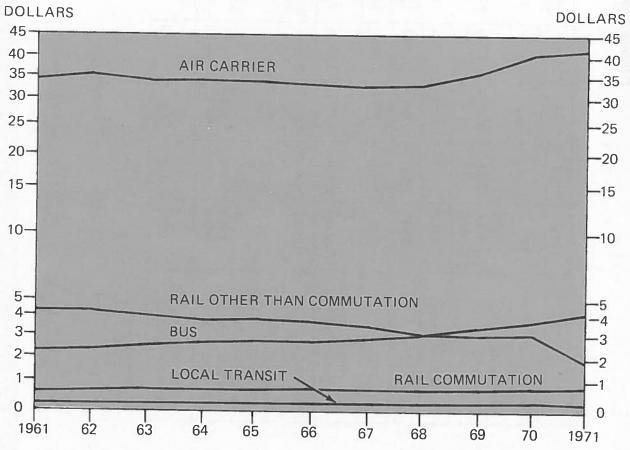


Table 4. Total Operating Revenues, 1961 - 1971 (Millions of Dollars)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Air carrier, domestic and international Certificated, all services Supplemental	3,063.6	3,438.7	3,759.1	4,250.9	4,957.9	5,745.0	6,864.7	7,753.2	8,790.9	9,240.2 336.9	10,045.7
Class I bus, intercity	484.5	588.6	8.609	655.1	607.3	644.3	9.699	694.6	0.77.0	721.7	758.4
Local transit	1,389.7	1,403.5	1,390.6	1,480.1	1,143.8	1,478.5	1,556.0	1,562.7	1,625.6	1,707.4	1,740.7
Oil pipeline	914	939	980	1,013	1,051	1,096	1,157	1,205	1,309	1,409	1,4851
Class I intercity motor carriers of property	4,908.4	5,428.4	5,756.4	6,199.5	7,130.7	7,896.6	8,091.3	9,592.8	10,769.7 11,137.0	11,137.0	13,167.81
Class I rail	9,189.1	9,439.9	9,559.5	9,856.5	10,207.8	10,654.6	10,366.0	10,854.7	11,450.3	11,991.7	12,688.91
Water transport Classes A and B carriers, inland and coastal Maritime carriers	246.2	252.4 628.5	258.1 652.7	257.9	282.6	298.1 654.5	296.1 673.9	307.6	327.5 739.3	371.8 832.7	393.1 ¹ 748.1 ¹
Class A freight forwarders	143.1	150.4	152.2	156.2	155.4	180.0	185.7	196.9	211.1	211.0	215.91

¹ Preliminary. Sources: See page 94.

Total operating revenues, 1961 - 1971

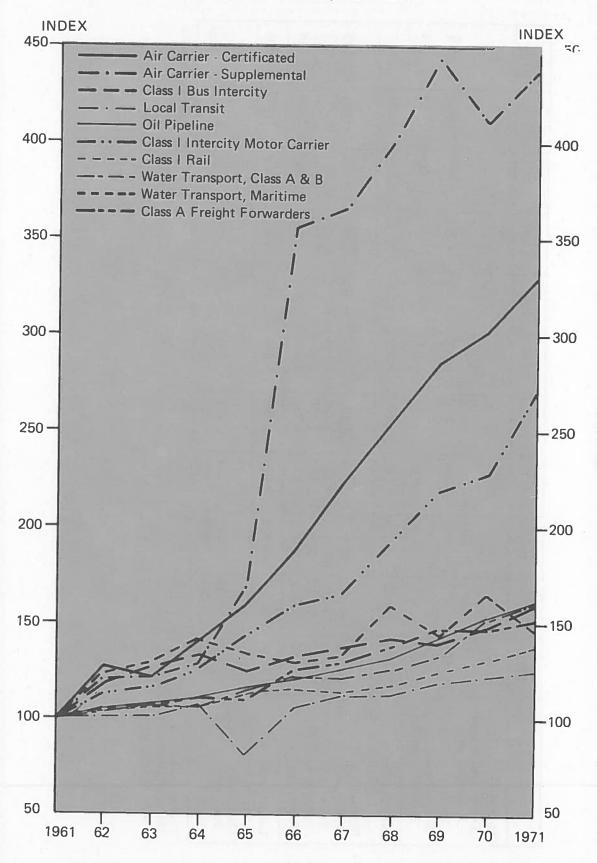


Table 5. Vehicle-Miles, 1961 -1971 (Millions)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Air carrier											
operations, all services	833	877	926	866	1,134	1,237	1,538	1,779	2,080	2,065	2,045
Supplemental domestic operations	n/a	n/a	n/a	n/a	n/a	n/a	42	50	43	34	36
General aviation	1,858	1,965	2,049	2,181	2,562	3,336	3,440	3,700	3,926	3,207	3,144
Highway Passenger car and taxi 604,557 ¹ 629,097 ¹ Truck Intercity bus 1,091 1,137 School bus 1,550 1,610	604,557 ¹ 128,582 1,091 1,550	629,097 ¹ 133,289 1,137 1,610	645,371 ¹ 155,569 1,155		677,613 ¹ 706,386 164,271 171,436 1,183 1,157 1,724 1,763	744,844 173,905 1,200 1,884	766,466 182,456 1,205 1,870	805,693 196,651 1,190 1,937	849,633 206,680 1,195 2,030	890,844 214,670 1,209 2,100	939,102 227,037 1,202 2,212
Local transit	2,077	2,047	2,022	2,016	2,008	1,984	1,997	1,989	1,967	1,883	1,846
Class I rail Passenger Freight	198	193 393	189	184	172	164	150 420	123 429	107	93	53 ² 430 ²
										n = e/ n	n/a = not available

¹ Includes motorcycles.
² Excludes AMTRAK operations.
Sources: See page 95.

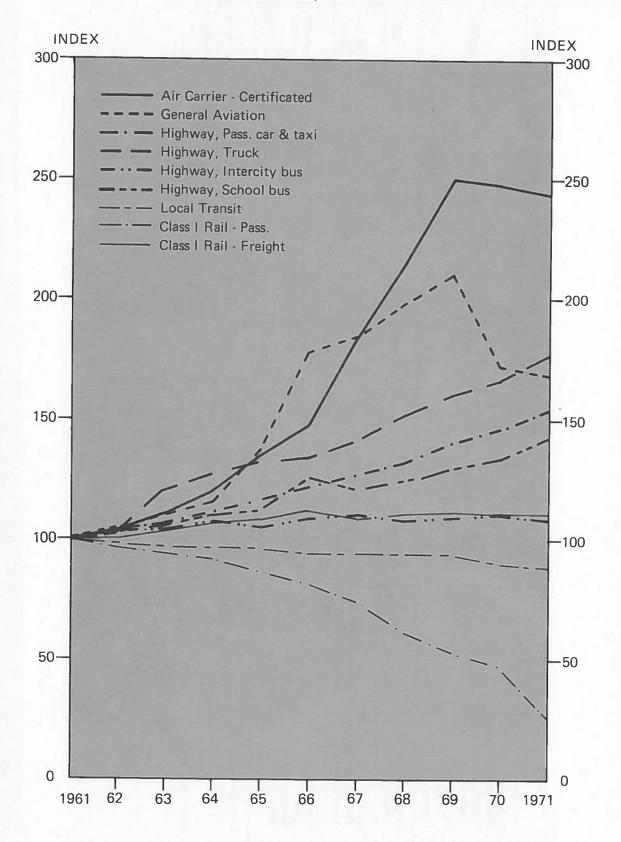


Table 6. Passenger-Miles, 1961 - 1971 (Millions)

			1900	1964 1965 1960	1964 1965 1966	1961 1962 1963 1964 1965 1966 1967
22	,085 79,522	63,085		53,226 63,085	45,046 53,226 63,085	39,016 45,046 53,226 63,085
400	n/a	n/a n/a		n/a	n/a n/a	n/a n/a
7,000		5,700		4,400 5,700	3,700 4,400 5,700	3,400 3,700 4,400 5,700
8 8	3,657 1,686,225 1,600 24,900	1,638,657	1,554,049 1,638,657 23,800 24,600	1,554,049 1,638,657 23,800 24,600	1,490,749 1,554,049 1,638,657 23,300 23,800 24,600	1,419,816 1,490,749 1,554,049 1,638,657 22,500 23,300 23,800 24,600
	7,095 15,201 1,193 4,281	17,095 4,193		17,388 17,095 4,128 4,193	18,247 17,388 17,095 4,199 4,128 4,193	18,496 18,247 17,388 17,095 4,101 4,199 4,128 4,193
	2,903 10,920	12,903		13,260 12,903	14,048 13,260 12,903	14,396 14,048 13,260 12,903
	3,400 3,400	3,100 3,400 3,4	3,400	3,100 3,400	2,800 3,100 3,400	2,800 2,800 3,100 3,400

Sources: See page 96.

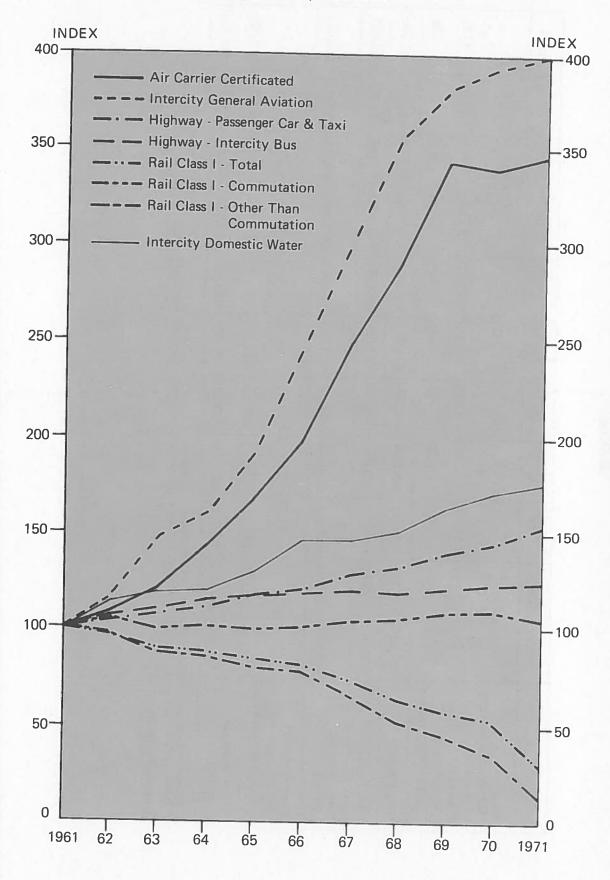


Table 7. Cargo Ton-Miles, 1961 - 1971 (Millions)

	+										
	1961	1962	1963	1964	1965	1966	1961	1968	1969	1970	1971
Air carrier											
Certificated domestic											
operations, all	798	1,155	1,099	1,294	1,670	1,985	2,310	2,590	3,295	3,010	3,151
Supplemental	159	215	219	268	298	425	442	494	469	391	306
									0	101	000 777
Oil pipeline	233,172	237,723	253,431	268,655	306,393	332,916	361,041	391,300	411,000	431,000	444,000
	0	000	201 797	2 K 2 C 3 O	878 789	738 395	719,498	744,023	767,841	764,809	739,404
Class I rail	563,361	292,562	021,101	000,000	2,12						
Motor vehicles,	296,000	309,000	336,000	356,000	359,000	380,917	388,500	396,300	404,000	412,000	430,000
faragain											
Water transport											
Inland waterways,				,			,				. !
including Great	902 208	223.089		234,172 250,165	262,421	280,527	281,400	291,409	302,901	318,560	307,000
Lakes	,									1	0
Total domestic system	465,291	474,969	480,577	488,829	489,803	507,084	515,387	520,633	528,897	596,195	593,164
6											

Includes revenue ton-miles of freight, U.S. and foreign mail, and express.
 Includes revenue ton-miles of freight and express. Supplemental carriers are not ordinarily authorized to carry mail.
 Sources: See page 96.

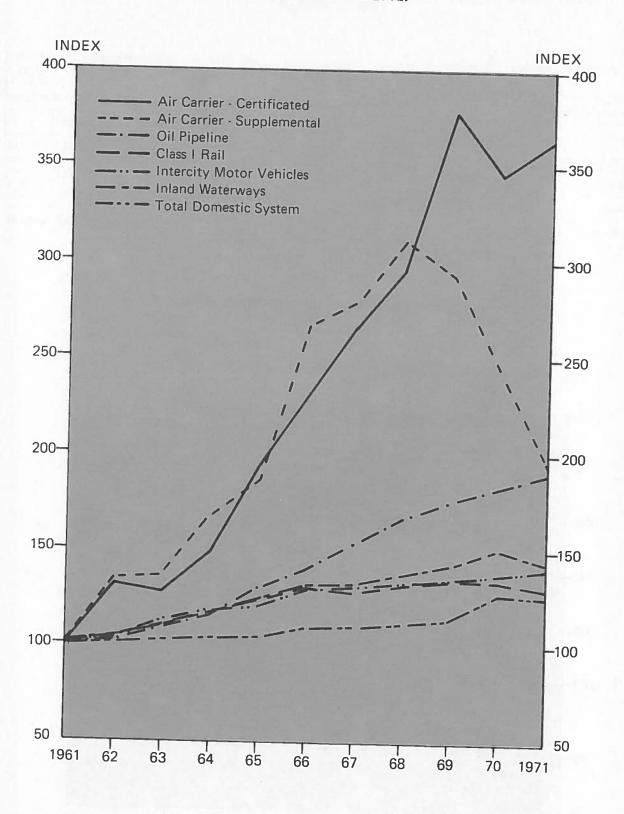


Table 8. Basic Intercity Mileage Within the Continental United States, 1961 - 1971 (Statute Mileage)

					75					T	
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
D. Throads, all line haul		215.090	214,387	212,603	211,925	211,107	209,826	208,648	207,526	206,265	205,00
Railroads, all line haul	200,543			210,807	213,764	216,745	209,478	213,555	216,453	218,604	n/a
Oil pipelines¹ Inland waterways	25,260	25,260	25,260	25,380	25,380	25,380	25,380	25,380	25,543	25,543	25,54
	571,145		594,412	606,154	617,114	628,600	640,313	648,768	657,601	665,903	n/a
Highways	245,620		252,325			259,083	264,165	277,554	283,861	291,231	n/a
Airways	2-10,020		<u> </u>								21 - 1-

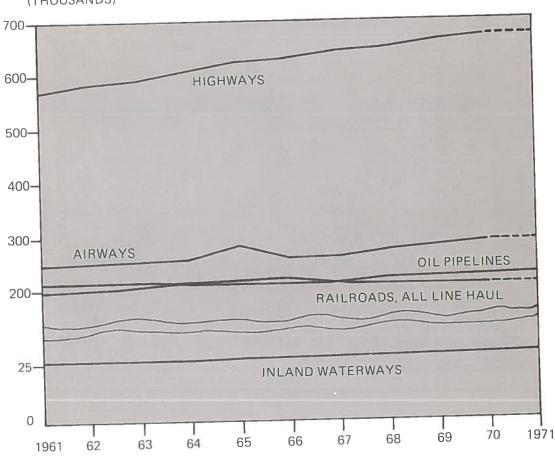
Includes gathering lines.

Sources: See page 97.

n/a = not available

Basic intercity mileage within the continental United States $1961-1971 \label{eq:continental}$





n/a = not available

23,854

23,419

Sources: See page 97.

SUPPLEMENTARY DATA Part 1: Transportation and the Economy

Table 10. Personal Consumption Expenditures by Transportation Sector, 1961-1971 [Millions of dollars]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	0261	1971
Transportation Total	41,455	45,975	49,140	51,753	57,825	60,489	62,588	71,983	77,722	77,788	90,113
User-Operated Transportation Total New Cars and Net Purchases of Used Cars Tires, Tubes, Accessories and Parts Maintenance Gasoline & Oil Tolls Insurance	38,135 15,991 2,430 4,973 12,386 315 2,040	42,516 19,486 2,557 5,200 12,908 327 2,038	45,695 21,549 2,707 5,591 13,457 344 2,047	48,161 22,814 2,970 5,683 14,129 381 2,184	54,053 26,670 3,168 6,187 15,146 404 2,478	56,446 26,805 3,520 6,419 16,562 447 2,693	58,163 26,646 3,848 6,637 17,619 464 2,949	67,265 32,979 4,479 7,292 18,992 504 3,019	72,639 35,087 5,157 7,948 20,894 540 3,013	72,262 31,585 5,744 8,670 22,211 574 3,470	84,259 40,244 6,505 9,604 23,461 605 3,840
Purchased Local Transportation Total Street, Electric, Railway and Local Bus Taxicab Railway (commutation)	1,953 1,256 570 127	1,981 1,266 588 127	1,977 1,252 595 130	1,988 1,261 593 134	2,022 1,278 607 137	2,099 1,317 642 140	2,216 1,385 687 144	2,266 1,397 716 153	2,386 1,477 747 162	2,505 1,557 776 172	2,596 1,578 844 174
Purchased Intercity Transportation Total Railway (non-commutation) Intercity Bus Airline Other	1,367 309 321 707 30	1,478 303 336 809 30	1,468 268 316 853 31	1,604 262 324 985 33	1,750 242 329 1,145	1,944 240 356 1,318	2,209 206 358 1,617 28	2,452 177 365 1,879 31	2,747 164 377 2,172 34	3,021 148 391 2,446 36	3,258 129 403 2,693

Sources: See page 98.

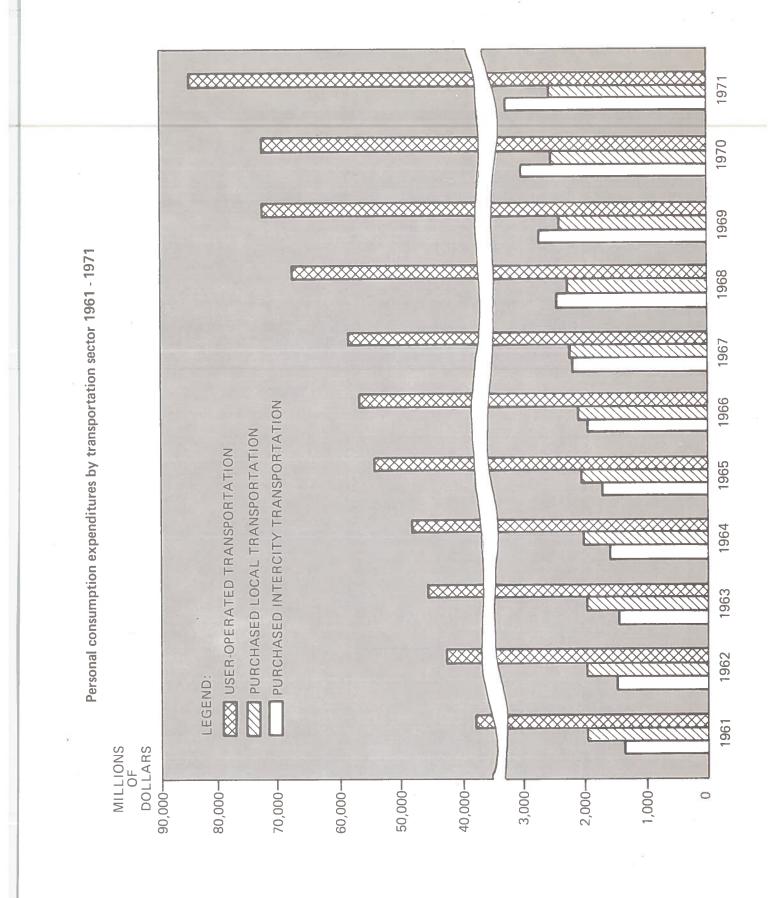


Table 11. Personal Consumption Expenditures by Type of Product, 1961 - 1971 (Millions of Dollars)

			T										
1971	148,110	66,877	10,613	99,164	93,565	51,392	37,140	90,113	42,511	11,100	660'6	5,217	664,901
1970	143,272	61,966	10,425	90,921	86,629	46,955	34,695	77,788	40,197	10,428	8,609	4,806	616,761
1969	130,707	59,924	9,760	84,141	82,294	42,814	33,277	77,772	36,901	9,536	8,084	4,247	579,178
1968	125,134	55,474	9,049	77,311	76,125	37,767	29,532	71,983	33,623	8,690	7,605	3,795	536,178
1961	117,744	50,995	8,558	71,848	70,514	34,491	26,182	62,588	30,758	7,576	6,948	3,864	492,066
1966	114,621	48,360	8,068	67,506	66,786	31,142	24,287	60,489	28,850	6,608	6,421	3,196	466,334
1965	106,791	43,427	7,509	63,157	61,877	28,120	22,055	57,825	26,304	5,585	5,609	3,206	431,465
1964	100,671	40,564	7,032	59,189	58,255	25,681	20,066	51,753	24,573	5,217	5,527	2,828	401,356
1963	96,008	37,049	6,530	55,410	54,127	23,340	18,422	49,140	22,213	4,736	5,262	2,745	374,982
1962	93,054	35,700	6,248	51,950	51,170	22,002	16,481	45,975	20,472	4,392	5,082	2,529	355,057
1961	90,126	33,836	5,792	48,717	48,258	20,321	16,021	41,455	19,506	4,028	4,926	2,166	335,152
	Food and tobacco	Clothing accessories and jewelry	Personal care	Housing	Household operation	Medical care expenses	Personal business	Transportation ¹	Recreation	Private education and research	Religious and welfare activities	Foreign travel	Total

Excluding foreign travel

Sources: See page 98.

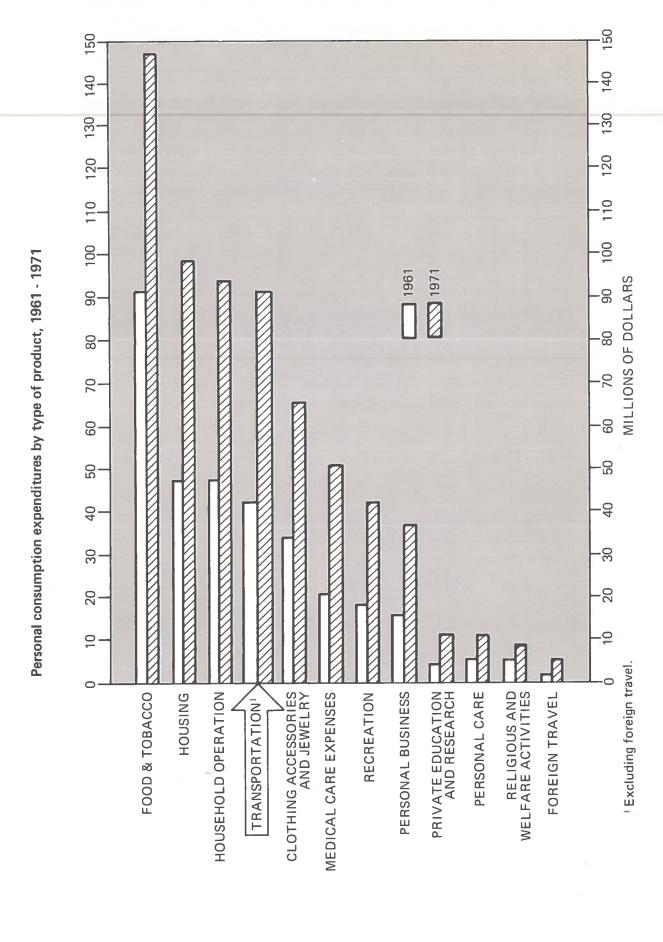


Table 12. National Income by Transportation Sector, 1961 - 1971 (Millions of Dollars)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Total	18,252	19,060	20,025	21,372	22,926	24,853	25,223	26,909	28,739	29,687	32,510
Railway	6,475	6,438	6,634	6,795	7,084	7,327	6,821	6,992	7,351	7,214	7,444
Local, suburban, and highway passenger	1,678	1,703	1,716	1,771	1,857	1,951	2,049	2,210	2,163	2,302	2,411
Motor freight and warehousing	6,051	6,588	6,913	7,463	8,185	8,998	9,178	10,326	11,211	11,650	13,643
Water	1,655	1,724	1,815	2,001	2,010	2,274	2,320	2,476	2,392	2,511	2,382
Air	1,443	1,664	1,881	2,229	2,574	3,027	3,456	3,556	4,120	4,336	4,873
Pipeline	357	340	426	429	454	412	423	414	447	511	540
Transportation services	593	603	640	684	754	864	976	935	1,055	1,163	1,217

Sources: See page 98.

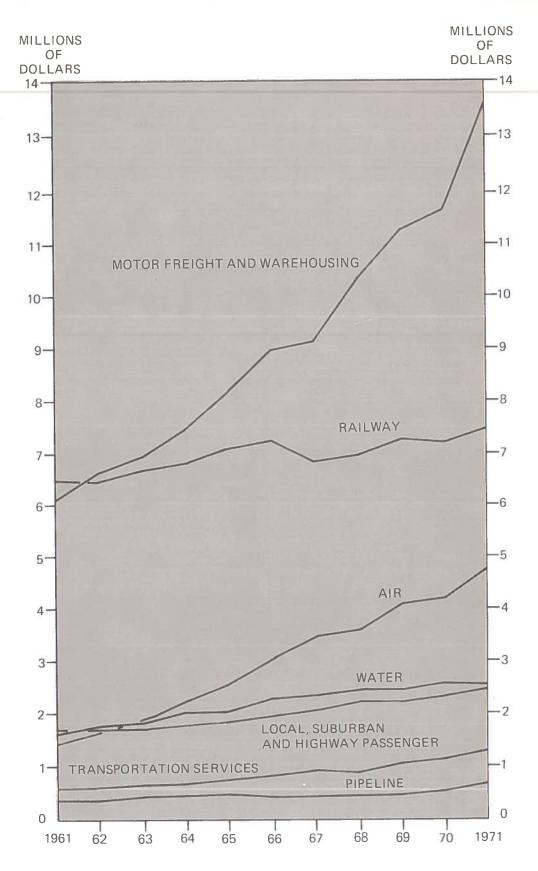


Table 13. Average Annual Earnings per Full-Time Employees by Transportation Sector, 1961 - 1971 (Dollars)

Contract to	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Total	6,361	6,638	6,852	7,161	7,473	7,785	8,129	8,676	9,321	9,928	10,877
Railway	6,392	6,610	6,762	7,026	7,407	7,660	8,034	8,585	9,230	9,767	11,007
Local, suburban, and highway passenger	4,854	4,985	5,120	5,281	5,436	5,615	5,801	6,101	6,296	6,663	6,947
Motor freight and warehousing	6,730	7,031	7,328	7,719	8,030	8,362	8,672	9,287	9,906	10,428	11,613
Water	6,597	7,059	7,317	7,507	7,770	8,310	8,619	9,120	9,990	10,662	10,907
Air	6,851	7,269	7,443	7,869	8,122	8,363	8,846	9,363	10,270	11,427	12,306
Pipeline	7,318	7,524	7,800	8,105	8,053	8,667	8,778	9,222	9,722	10,706	11,412
Transportation services	5,800	5,935	6,078	6,288	6,518	6,761	7,120	7,570	8,071	8,608	9,039

Sources: See page 98.

Average annual earnings per full-time employees by transportation sector, 1961 - 1971

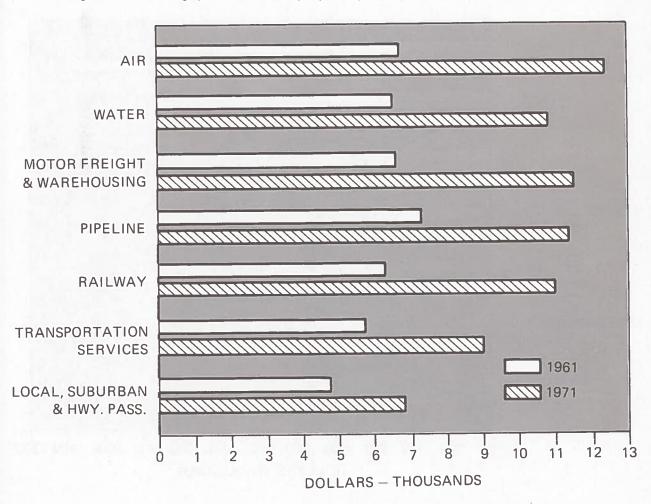


Table 14. Average Number of Full-Time and Part-Time Employees by Transportation Sector, 1961 - 1971 (Thousands)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Total	2,470	2,475	2,470	2,494	2,537	2,614	2,656	2,694	2,726	2,689	2,639
Railway	813	793	770	755	738	724	696	667	643	626	600
Local, suburban, and highway passenger	278	273	270	268	269	272	279	280	280	280	277
Motor freight and warehousing	853	883	902	921	965	1,008	1,021	1,055	1,093	1,080	1,088
Water	227	224	221	230	226	240	242	. 241	227	218	202
Air	195	197	203	213	229	256	299	331	356	354	343
Pipeline	22	21	20	19	19	18	18	18	18	18	17
Services	82	84	84	88	91	96	101	102	109	113	112

Sources: See page 99,

Average number of full-time and part-time employees by transportation sector, 1961 - 1971

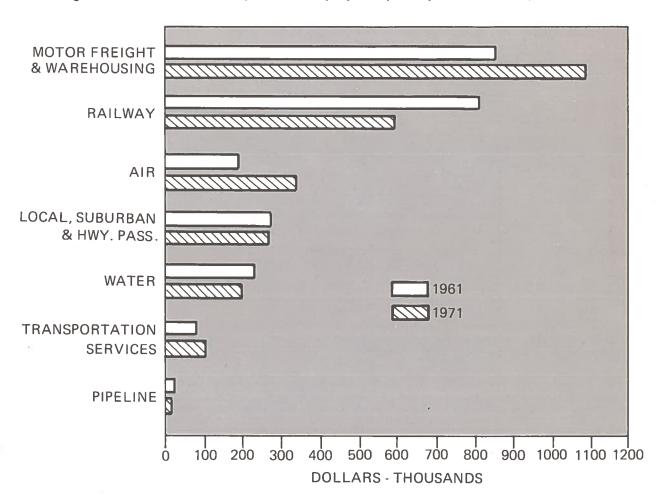
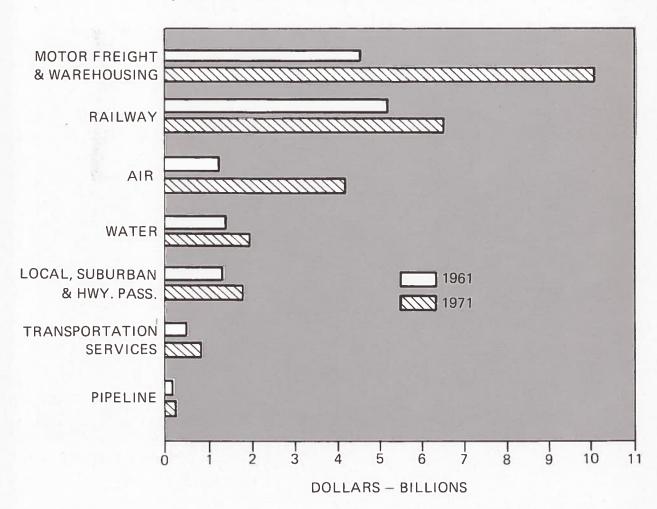


Table 15. Wages and Salaries by Transportation Sector, 1961 - 1971 (Millions of Dollars)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Total	14,414	15,008	15,417	16,248	17,217	18,458	19,574	21,160	22,977	24,125	25,898
Railway	5,197	5,242	5,207	5,305	5,466	5,546	5,592	5,726	5,935	6,114	6,604
Local, suburban, and highway passenger	1,296	1,301	1,321	1,352	1,397	1,460	1,543	1,629	1,681	1,771	1,834
Motor freight and warehousing	4,630	4,992	5,298	5,702	6,215	6,765	7,102	7,857	8,688	9,031	10,138
Water	1,359	1,426	1,456	1,554	1,585	1,795	1,879	1,979	2,048	2,141	1,985
Air	1,336	1,432	1,511	1,676	1,860	2,141	2,645	3,099	3,656	4,038	4,221
Pipeline	161	158	156	154	153	156	158	166	175	182	194
Services	435	457	468	503	541	595	655	704	794	878	922

Sources: See page 99

Wages and salaries by transportation sector, 1961 - 1971

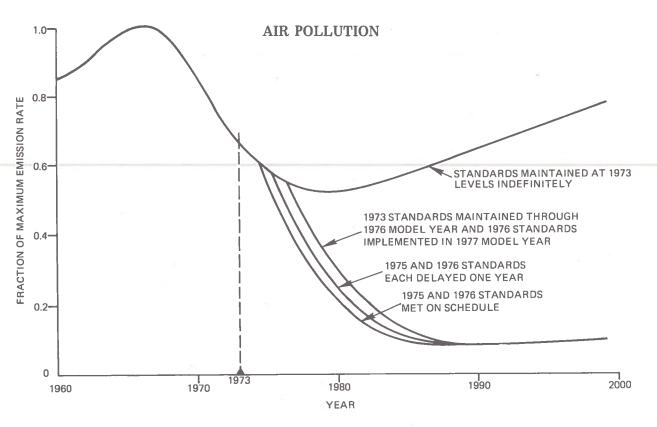


SUPPLEMENTARY DATA Part 2: Transportation, Energy, and the Environment

Table 16. Fuel Consumption by Mode, 1961-1971

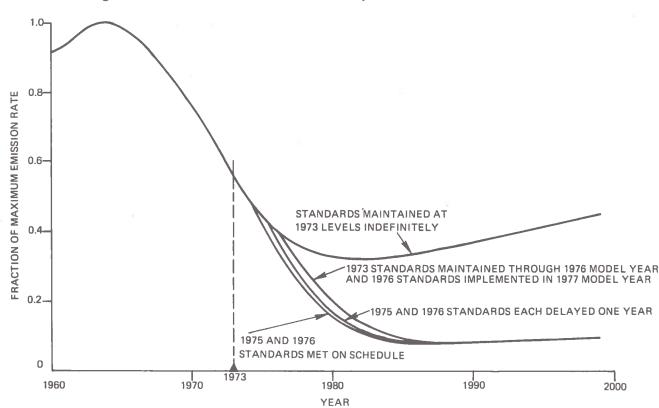
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Class I Railroads											
Locomotives											
Diesel Oil, gals × 106	3,375	3,456	3.537	3,624	3,736	3,920	3,883	3.917	3,919	3,804	3,819
Fuel Oil, gals × 106	94	101	90	85	77	65	47	42	33	0,004	0,010
Electricity, KWH × 106	1,037	1,094	1.018	931	933	922	832	750	610	578	534
Coal, tons	9,394	8,256	7,332	6,831	3,695	3,235	2,310	1,669	1,137	1,238	1,191
Motor Cars							-,	_,	-,	1,200	1,101
Diesel Oil, gals × 10 ⁶	7	7	7	7	6	6	6	5	5	8	4
Electricity, KWH × 106	589	592	591	583	576	576	580	567	538	763	756
Gasoline, gals	10,497	7,033	7,591	4,585	_	_	_	-	_	_	_
Air											
Certificated Carriers											
Aviation Gasoline, gals X 106	951	739	651	589	519	398	268	128	33	15	12
Jet Fuel, gals × 106	2,073	2,808	3,291	3,830	4,650	5,670	7,523	8,891	10,113	10.085	10,140
General Aviation							.,	-,	,	10,000	10,110
Aviation Gasoline, gals X 106	n/a	241	250	262	292	375	396	495	522	551	508
Jet Fuel, gals × 106	n/a	20	32	41	81	106	138	n/a	168	208	226
Highway											
Gasoline, gals × 106											
Pass. Cars + Taxis	42,033*	43,771*	45,246*	47,567*	50,206	53,220	55,007	58,413	62,325	65,649	69,213
Motorcycles		_		_	69	92	103	111	123	135	301
Diesel + Gasoline, gals X 106						02	100	111	140	100	901
Commercial Buses	610	610	606	622	645	637	646	655	657	644	631
School Buses	220	227	232	242	249	259	264	277	290	300	316
Single-unit Trucks	n/a	n/a	12,348	13,199	13,504	13,636	14,470	15,674	16.528	17,237	18,221
Combination Trucks	n/a	n/a	6,084	6,271	6,431	6,779	7,203	7,808	8,199	8,363	8,865
Water											
Vessels											
Residual Fuel Oil, gals X 106	3,6 7	3,545	3,213	3,487	3,093	3,093	3,389	3,678	3,506	3,774	3.307
Distillate Fuel Oil, gals X 106	612	665	636	672	652	699	734	766	793	819	880
Gasoline, gals × 106	n/a	n/a	n/a	n/a	n/a	485	501	533	569	598	645
Transit											
Electricity, KWH × 106											
Rapid Transit	2,108	2,115	2,125	2,171	2,185	2,075	2,194	2,250	2,291	0.001	0.000
Surface Rail	362	325	255	222	2,100	2,075	180	179	173	2,261	2,262
Trolley	381	346	262	204	181	166	157	179	173	157 143	153
	301	340	202	204	101	100	107	197	154	143	141

*Includes Motorcycles. n/a = not available Sources: See page 99.



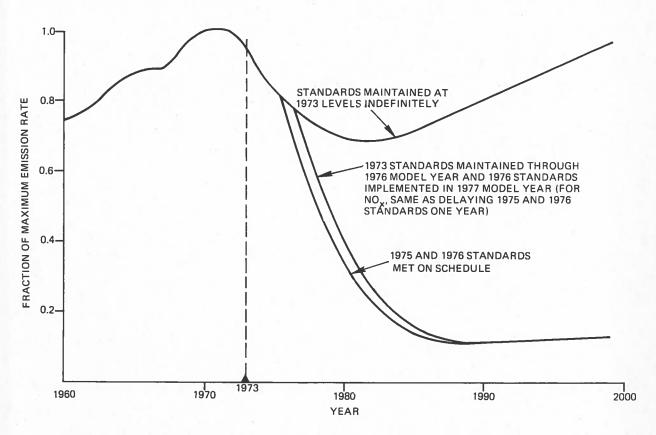
Source: National Academy of Sciences, Report by the Committee on Motor Vehicle Emissions, February 15, 1973

Figure 9. Emissions of Carbon Monoxide by Automobiles in Urban Areas



Source: National Academy of Sciences, Report by the Committee on Motor Vehicle Emission, February 15, 1973

Figure 10. Emissions of Hydrocarbons by Automobiles in Urban Areas



Source: National Academy of Sciences, Report by the Committee on Motor Vehicle Emissions, February 15, 1973

Figure 11. Emissions of Oxides of Nitrogen by Automobiles in Urban Areas

WATER POLLUTION

WATER POLLUTION

Tables 17 - 19 pertain to 266 polluting incidents resulting from 1,416 oil tanker casualties which occurred in calendar years 1969 and 1970.

Table 17 shows the frequency and magnitude of these incidents for the following selected geographical areas:

- North West Atlantic Ocean (North of the Tropic of Cancer, between 30° West and the East Coast of the U.S. and Canada);
- North East Atlantic Ocean (North of the Tropic of Cancer, between 30° West and the West Coast of Europe including the Denmark Strait and Greenland Sea);
- North West Pacific Ocean (North of the Tropic of Cancer, and between the 180th meridian and the Coast of Asia including the sea of Okhotsk, the Sea of Japan and the Yellow Sea);
- The Mediterranean Sea; and
- The East Indian Ocean (North of the Tropic of Capricorn and between 20° and 70° East longitude including the Arabian Sea, the Gulf of Aden, and the Red Sea).

These data simply state that at least on a macroscopic view, tanker accidents and oil outflow are a direct function of tanker traffic density; i.e., the accidents occur where the tanker traffic is the densest such as in the Persian Gulf, Northern Europe, Japan, etc.

Table 17. Geographical Distribution of the Frequency and Magnitude of 266 Tanker-Polluting Incidents, 1969-1970

	Number of Incidents	Total Outflow
Northwest Atlantic Ocean Northeast Atlantic Ocean Northwest Pacific Ocean Mediterranean Sea East Indian Ocean	35 78 27 17 11	93,049 86,969 26,848 17,400 54,163
Subtotal	168	278,429
All other geographical locations	98	152,291
Total	266	430,720 long tons

Source: V. F. Keith and J. D. Porricelli, U.S. Coast Guard, An Analysis of Oil Outflows Due to Tanker Accidents

Table 18 shows the 266 incidents and associated outflows on an area basis.

Areas are defined as follows:

- Coastal within 50 nautical miles of any shoreline;
- Entranceway entrance to a harbor, bay, river, etc.;
- Harbor within the confines of harbors, bays, rivers, etc.;
- Pier at a wharf, pier, dock, quay, etc. with tanker physically moored thereto; and
- Sea more than 50 nautical miles from any shoreline.

Table 18. Area Location and Outflows of the 266 Tanker-Polluting Incidents, 1969-1970

Area	Number of Incidents	Amount of Outflow	Percent of Outflow		
Coastal	60	60,797	14.1		
Entrance	59	83,286	19.3		
Harbor	45	22,651	5.3		
Pier	43	19,159	4.5		
Sea	52	240,003	55.7		
Unknown	7	4,824	1.1		
Total	266	430,720	100.00		

Source: V. F. Keith and J. D. Porricelli, U.S. Coast Guard, An Analysis of Oil Outflows Due to Tanker Accidents

The table shows that 207 incidents with an attendant outflow of 185,893 long tons occurs within 50 miles of a shoreline. It also shows that 88 incidents with an attendant outflow of 41,810 long tons occurred either at the pier or within the confines of a harbor.

casualties. For example, in the coastal area, 54 incidents out of 60 are either groundings or collisions Table 19 shows on an individual basis, the frequency and magnitude of different types of and account for 56,771 long tons of outflow. Other important points to note are as follows;

- In the entranceways, 28 groundings account for 77,003 long tons of outflow out of a total of 83,286 long tons that were spilled;
- In the harbors, 16 groundings had an outflow of 11,930 long tons out of a total of 22,651 long tons spilled;
- Six explosions at the pier had an outflow of 14,417 long tons out of a total of 19,159 tons spilled;
- At sea, the 39 structural failures accounted for 207,390 long tons of outflow or 86.4 percent of the "at sea" total.

Table 19. Outflows of 266 Tanker-Polluting Incidents Shown by Type of Casualty and Area Locations, 1969-1970

SEA UNKNOWN	5	306 1 109	٠,	1 0	-	- 0	0 0 200	060,4 0 060,102	•	240,003T 7 4,824T
IR How		612	1,417 6	2.612		184		213 0		19,159T 52
PIER No.Outflow		9	6 14	11 2	0	<u>ا</u>	4	٦,		43
HARBOR No. Outflow	0	5.917	0	1.326	11,930	3,437	41	0		22,651T
H ON	0	19	0	7	16	9	2	0		45
ENTRANCE No. Outflow	0	5,651	0	92	77,003	36	120	400		83,286T
	0	24	0	Π	28	2	က	П		59
COASTAL No. Outflow	25	21,683	3,824	152	35,088	0	0	25		TL62,09
		29	2	7	25	0	0	-		09
Type of Casualty	Breakdown	Collision	Explosion	Fire	Grounding	Ramming	Structural Failure	Other		Column Totals

Source: V. F. Keith and J. D. Porricelli, U.S. Coast Guard, An Analysis of Oil Outflows Due to Tanker Accidents

NOISE POLLUTION

NOISE SOURCES AND THE dB SCALE

Noise sources are governed by many factors, such as: (a) the design, construction, maintenance, and manner of operating a vehicle, and (b) the path that the sound waves travel to reach the observer (i.e., distance, obstructions, reflections off surfaces, etc.). Typical values of noise levels from some commonly occurring events are shown here to provide a familiarity with two widely-used noise-measuring scales.

Sound levels are measured by a meter in units called decibels (dB). However, because of the complex way in which the human ear works, measurement of different noises does not always correspond to their relative loudness or annoyance. Different scales have been developed, therefore, to furnish guidance in evaluating the importance of different noise sources. Aircraft noise is evaluated in EPNdB, a unit which weighs the sound pressure of the various frequencies making up the noise and adds corrections for annoying tones and durations of such sounds. Another commonly used scale, called dB(A), is based on a different method of weighting and is widely accepted for surface modes of transportation. These two scales differ by nearly a constant (i.e., EPNdB-dB(A) \cong 13dB).

A 10-dB increase in sound level on either of these noise-level scales doubles the apparent loudness or annoyance of the sound. Conversely, a 10-dB decrease in sound level will halve the loudness of the sound, as adjudged by the hearer.

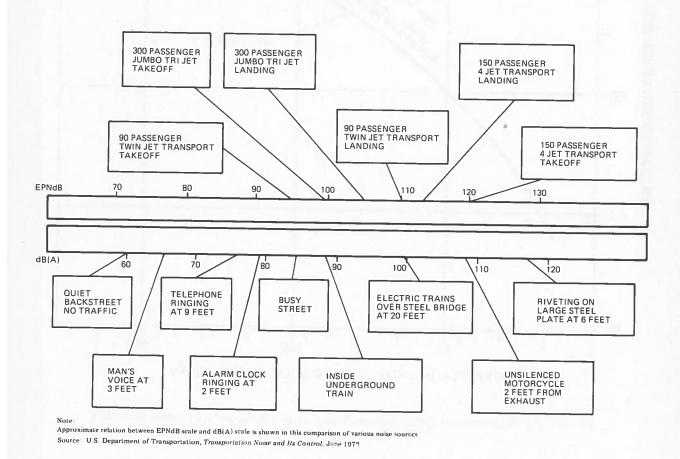
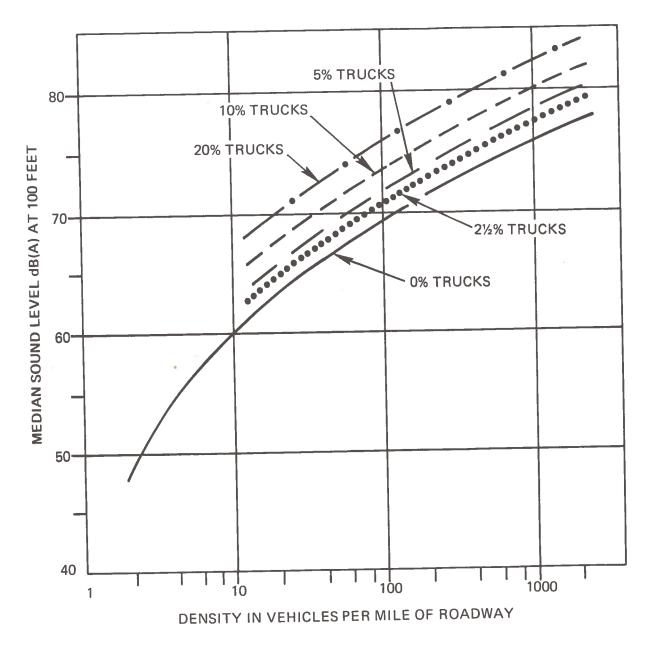


Figure 12. Typical Noise Levels

The chart provided below shows the level of noise which would be exceeded by fifty percent of the time for traffic with a specified speed, vehicle density and mix of trucks.

From the illustration, it can be seen that the median sound level for a road with 100 automobiles per mile is equal to that of a road with 16 autos and 4 trucks per mile. This indicates that four trucks at 50 mph are equivalent (from the standpoint of average community noise level) to 84 autos. This representation highlights the need for progress in the reduction of the loudest sources—trucks—if community noise levels adjacent to our highways are to be improved.



Source: U.S. Department of Transportation, Transportation Noise and Its Control, June 1972

Figure 13. Median Noise Level Estimates of Mixed Highway Traffic at 50 Mph

AIRCRAFT TAKEOFF AND LANDING NOISE

Takeoff Noise on the Ground. Aircraft use full power during takeoff and are therefore at their noisiest in this operation. Since the noise heard depends on both the intensity of sound at the source and the distance between the source and the listener, it is important for aircraft to reach sufficient altitude before crossing residential areas.

Landing Noise on the Ground. Aircraft engines produce less noise during landing because lower power is used. However, the noise that is generated is annoying because of the screech or whine characteristic that predominates during this operation. A gradual descent for a landing begins 5 to 10 miles away from the airport, and generally follows a 2.5 to 3-degree "glide-slope," resulting in constantly increasing noise levels on the ground as the aircraft comes closer to the airport.

CURRENT AIRCRAFT NOISE LEVELS AT ESTABLISHED GROUND MEASURING POINTS

These graphs show the noise levels of various jet transports, measured at prescribed points on the ground for prescribed aircraft operations, in accordance with the Federal Aviation Regulations, Part 36. These graphs show the noise level limits prescribed by the FAA for new aircraft. Takeoff noise levels were measured at a point 3.5 nautical miles from brake release along the extended centerline of the runway. Aircraft were operated with the power reduced prior to the measuring point to the minimum safe thrust that would maintain horizontal flight if one engine suddenly became inoperative. Landing approach noise levels were measured at a point one nautical mile from the threshold of the runway along the extended centerline of the runway with the aircraft on a stabilized three-degree angle of approach for landing. Maximum noise levels to the side of the takeoff path (also shown here) were also measured to describe the noise characteristics of aircraft. Such measurements are made at a point 0.25 nautical miles to the side of the takeoff path for two and three-engine aircraft and 0.35 nautical miles to the side of four-engine aircraft. The FAA sideline noise-level limits for new aircraft are the same as for approach requirements.

Note the improvement in the noise level of the DC-10 and L-1011 over the older aircraft. The newer planes are some 15 to 20 dB below equivalent weight older aircraft as a result of Government regulation

Source: U.S. Department of Transportation, Transportation Noise and Its Control, June 1972

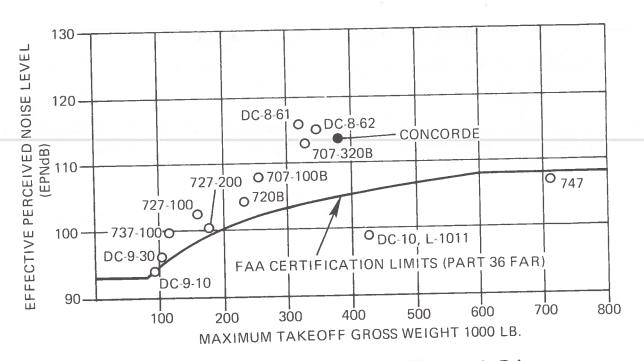


Figure 14. Aircraft-Takeoff Noise Levels 3.5 NM from Brake Release

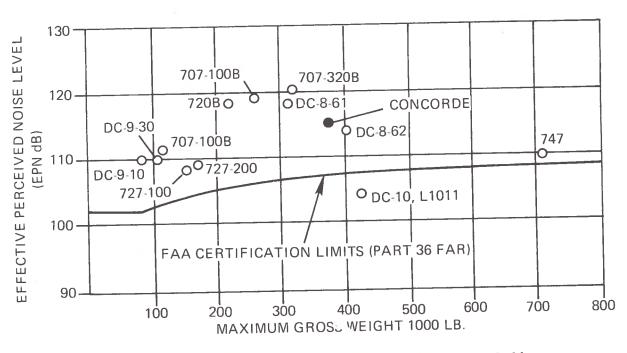


Figure 15. Aircraft-Approach Noise Levels 1 NM from Threshold

Source: U.S. Department of Transportation, Transportation Noise and Its Control, June 1972

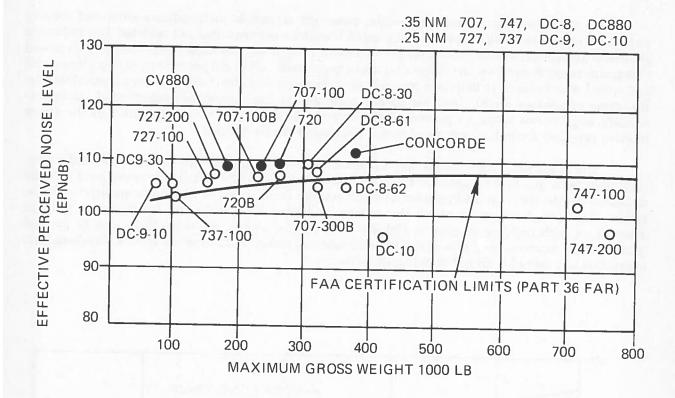


Figure 16. Aircraft Sideline Noise

Source: U.S. Department of Transportation, Transportation Noise and Its Control, June 1972

RAPID TRANSIT NOISE

As an alternative to the automobile, passenger service in metropolitan areas and densely populated corridors could be provided by rapid transit or conventional rail vehicles. The following graphed data are presented in the context of modern practices, including welded rail (which would constitute improvement on the order of 6 dB or more over bolted-rail sections) and appropriate rail and wheel maintenance to maintain true rolling surfaces (which would account for improvement on the order of another 5 dB). Also, the data is presented in the context of tangent track, or appropriately large radius turns, to prevent flange squeal. (It should be noted that most of the above modern practices are not incorporated in the older rapid-transit systems.)

The illustration presents the wayside noise levels for a one-car, two-car, eight-car and a very-long train, as a function of distance from the track centerline. The increase in noise level at small distances due to the increased number of noise sources from multiple cars is accentuated with distance. This spread-out array of sources results in higher near-field noise levels and in reduced attenuation with distance (similar to highway traffic noise). Thus, the noise from a single car will geometrically attenuate at a rate of 6 dB per doubling of distance, while noise from a very-long train attenuates at a rate of 3 dB per doubling of distance.

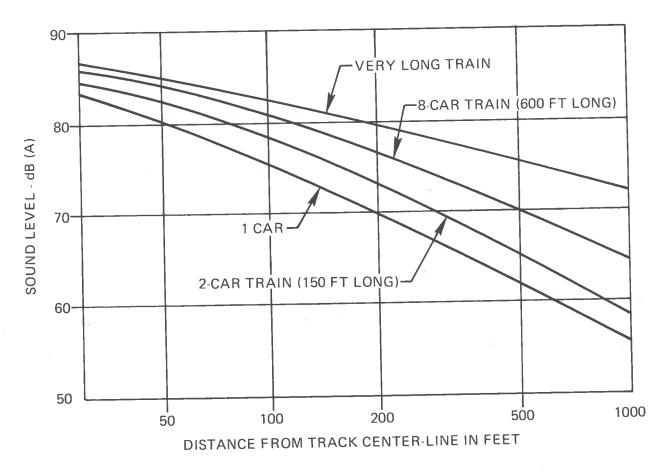


Figure 17. Wayside Noise Level for Transit Trains of Various Lengths at 40 Mph

Source: U.S. Department of Transportation, Transportation Noise and Its Control, June, 1972

APPENDIX A Source Information

- (1) Total Transportation-Sum of Domestic and International.
- (2) Domestic-Sum of Highway, Local Transit, Rail, Air, Water, and Pipeline.
- (3) International-Sum of Air Carrier and Water.
- (4) Highway-Sum of Auto, Truck, and Bus.
- (5) Auto-Sum of Personal Passenger Car and Taxi.
- (6) Personal Passenger Car-TAA, Transportation Facts and Trends, quarterly supplement, Jan. 1973, p. 5. Figure represents sum of expenditures for new and used cars, tires, tubes, accessories, gasoline and oil, tolls, insurance, interest on debt, auto registration fees, operator's permit fees, repair greasing, washing, parking, storage, and rental.
- (7) Taxi-Ibid., Jan. 1973, p. 5.
- (9) Truck-Sum of Local Truck and Intercity Truck.
- (10) Local Truck-Ibid., Jan. 1973, p. 4.
- (11) Intercity Truck-Sum of ICC-Regulated Truck and Nonregulated Truck.
- (12) ICC-Regulated Truck-*Ibid.*, Jan. 1973, p. 4. Revenues of the Class I, II, III motor carriers of property. Revenues include local cartage under the assumption that the majority of such revenues constitute pickup and delivery of intercity freight.
- (13) Nonregulated Truck-Ibid., Jan. 1973, p. 4.
- (14) Bus-Sum of Intercity Bus and School Bus.
- (15) Intercity Bus-NAMBO, Bus Facts, 1972, p. 24. Operating revenues of Class I, II, III carriers reporting to the ICC, plus intrastate carriers. Includes passenger, express, mail, station, and other revenues.
- (16) Passenger, Intercity Bus-Ibid., 1972, p. 25. Total passenger revenues of Class I carriers plus 25 percent of this amount as estimated passenger revenues for Class II and III and intrastate carriers.
- (17) Cargo, Intercity Bus-Ibid., 1972, p. 25. Total package express and mail revenues of Class I carriers plus 25 percent of this amount as estimated cargo revenues for Class II and III and intrastate carriers.
- (18) School Bus-TAA, Transportation Facts and Trends, quarterly supplement, Jan. 1973, p. 5.
- (19) Local Transit-ATA, Transit Fact Book, '72-'73, p. 9. Total operating revenues of Surface Rail, Subway and Elevated, Trolley Coach, and Motorbus.
- (20) Motorbus-Ibid., 1972-1973, p. 9. Operating revenues.

- (21) Trolley Coach-Ibid., 1972-1973, p. 9. Operating revenues.
- (22) Surface Rail-Ibid., 1972-1973, p. 9. Operating revenues.
- (23) Subway and Elevated-Ibid., 1972-1973, p. 9. Operating revenues.
- (24) Rail-AAR, Yearbook of Railroad Facts, 1972, p. 9. Total operating revenues of Class I railroads.
- (25) Rail, Passenger-Sum of Commuter and Intercity.
- (26) Rail, Commuter-*Ibid.*, 1972, p. 11. Sum of Class I passenger revenues from parlor and sleeping cars and other coaches.
- (28) Rail, Cargo-Ibid., 1972. Sum of Class I freight revenue (p. 10) and express and mail revenues (p. 12).
- (29) Air-Sum of General Aviation and Air Carrier.
- (30) General Aviation-TAA, *Transportation Facts and Trends*, quarterly supplement, Jan. 1973, p. 5. Figure represents the sum of operating costs and total retail value of new general aviation aircraft.
- (36) Air Carrier-Sum of Certificated and Supplemental.
- (37) Certificated-CAB, Air Carrier Financial Statistics, Dec. 1971, p. 1., column 8, line 17. Overall operating revenues, domestic operations.
- (38) Passenger, Certificated-*Ibid.*, Dec. 1971, p. 1., column 8, sum of lines 3 and 10. Total passenger revenues in scheduled and charter service.
- (39) Cargo, Certificated-*Ibid.*, Dec. 1971, p. 1., column 8. Sum of lines 4, 5, 6, 7, 8, 9 and 11. Includes revenues from scheduled service of freight, express, priority U.S. mail, nonpriority U.S. mail, foreign mail, excess baggage, and charter freight.
- (40) Supplemental-*Ibid.*, Dec. 1971, p. 58. Overall operating revenues of supplemental air carriers, total domestic and international operations. No separation of international and domestic revenues is available.
- (41) Passenger, Supplemental-*Ibid.*, Dec. 1971, p. 58. Sum of civilian (line 1) and military (line 2) passenger revenues. Total domestic and international operations.
- (42) Cargo, Supplemental-*Ibid.*, Dec. 1971, p. 58. Sum of civilian (line 3) and military (line 4) property revenues.
- (43) Water-Sum of Passenger and Cargo.
- (44) Passenger, Water-TAA, *Transportation Facts and Trends*, quarterly supplement, Jan. 1973, p. 5 Figure represents revenues of ICC-regulated carriers. Expenditures for private boating not available.
- (49) Cargo, Water-Ibid., Jan. 1973, p. 4.

- (51) Pipeline-Ibid., Jan. 1973, p. 4. Includes revenues of regulated and unregulated oil pipelines.
- (52) Air Carrier-Figure represents overall operating revenues of the certificated carriers, total international and territorial operations. Revenues of the supplemental carriers international operations are included in the domestic statistic.
- (53) Certificated-CAB, Air Carrier Financial Statistics, Dec. 1971, p. 5, column 4, line 1. Total international and territorial operations.
- (54) Passenger, Certificated-*Ibid.*, Dec. 1971, p. 5, column 4. Sum of total passenger revenues in scheduled service (line 3) and charter passenger revenues (line 10), total international and territorial operations.
- (55) Cargo, Certificated-*Ibid.*, Dec. 1971, p. 5, column 4. Sum of lines 4, 5, 6, 7, 8, 9, and 11. Includes revenues from scheduled service of freight, express, priority U.S. mail, non-priority U.S. mail, foreign mail, excess baggage, and charter freight. Total international and territorial operations.
- (59) Water-Sum of Passenger and Cargo.
- (60) Passenger, Water-TAA, Transportation Facts and Trends, quarterly supplement, Jan. 1973, p.5.
- (61) Cargo, Water-Ibid., Jan. 1973.

Figure 4: Vehicle-Miles, 1971

- (1) Total Transportation-Sum of Domestic and International.
- (2) Domestic-Sum of Highway, Local Transit, Rail, Air, and Water.
- (3) International-Sum of Air Carrier and Water.
- (4) Highway-Sum of Auto, Truck and Bus.
- (5) Auto-Sum of Personal Passenger Car, Motorcycle, and Taxi.
- (6) Personal Passenger Car-Bureau of Public Roads, Highway Statistics, 1971, table VM-1, p. 81. Includes vehicle travel on main rural roads, local rural roads, and urban streets.
- (7) Taxi-Data for taxi are included in the Personal Passenger Car category.
- (8) Motorcycle-Bureau of Public Roads, *Highway Statistics* 1971, table VM-1, p. 81. Includes vehicle travel on main rural roads, local rural roads, and urban streets.
- (9) Truck-Ibid., 1971, p. 8.1. Includes vehicle travel on main rural roads, local rural roads, and urban streets.
- (14) Bus-Sum of Intercity Bus and School Bus.
- (15) Intercity Bus-NAMBO, Bus Facts, 1972, p. 24. Includes operations of Class I, II, and III carriers reporting to the ICC and interstate carriers.

- (18) School Bus-Bureau of Public Roads, *Highway Statistics*, 1971, table VM-1, p. 81. Includes vehicle travel on main rural roads, local rural roads, and urban street.
- (19) Local Transit-Sum of Motorbus, Trolley Coach, Surface Rail, and Subway and Elevated.
- (20) Motorbus-ATA, Transit Fact Book, 1972-1973, p. 15.
- (21) Ibid., 1972-1973, p. 15.
- (22) Ibid., 1972-1973, p. 15.
- (23) Ibid., 1972-1973, p. 15.
- (24) Rail-Sum of Passenger and Cargo.
- (25) Passenger Rail-AAR, Yearbook of Railroad Facts, 1972, p. 37. This figure is passenger trainmiles of the Class I railroads.
- (28) Rail, Cargo-AAR, Yearbook of Railroad Facts, 1972, p. 35. This figure is freight train-miles of the Class I railroads.
- (30) General Aviation-FAA, Statistical Handbook, 1971, p. 194. Includes business, commercial, instructional, personal, and other flying.
- (36) Domestic Air Carrier-Sum of Certificated and Supplemental.
- (37) Certificated-CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 1. Sum of overall aircraft revenuemiles in scheduled service (line 3) and nonscheduled service (line 50), total domestic operations.
- (40) Supplemental-CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 43, line 21.
- (52) International Air Carrier-Sum of Certificated and Supplemental.
- (53) Certificated-CAB, Air Carrier Traffic Statistics, 1972, p. 7. Sum of overall aircraft revenuemiles in scheduled service (line 31) and nonscheduled service (line 50), total international and territorial operations.
- (56) Supplemental-CAB, Air Carrier Traffic Statistics, 1972, p. 43, line 21.

Figure 5: Passenger-Miles, 1971

- (1) Total Transportation-Sum of Domestic and International.
- (2) Domestic-Sum of Highway, Local Transit, Rail, Air and Water.
- (3) International-Air Carrier only. Passenger-miles in international water transport are not available
- (4) Highway-Sum of Auto and Bus.
- (5) Auto-Sum of Personal Passenger Car, Taxi, and Motorcycle.

- (6) Personal Passenger Car-Passenger-miles of Personal Passenger Car and Taxi. Figure represents vehicle-miles of travel from FHWA, *Highway Statistics*, 1971, table VM-1, p. 81, multiplied by an average occupancy of 2.2.
- (7) Taxi-Included in Personal Passenger Car category.
- (8) Motorcycle-Passenger-miles derived by multiplying vehicle-miles of travel from FHWA, *Highway Statistics*, 1971 VM-1, p. 81 by an average occupancy of 1.1.
- (14) Bus-Includes Intercity Bus only. School bus passenger-miles are not available.
- (15) Intercity Bus-NAMBO, Bus Facts, 1972, p. 24. Includes Classes I, II, III carriers reporting to ICC plus intrastate carriers.
- [24] Rail-AAR, Yearbook of Railroad Facts, 1972, p. 30. Total revenue passenger-miles of the Class I railroads.
- 26) Commuter Rail-Ibid., 1972, p. 30.
- 27) Intercity Rail-*Ibid.*, 1972, p. 30. Total revenue passenger-miles in coaches, parlor, and sleeping cars, Class I railroads.
- 29) Air-Sum of General Aviation and Air Carrier.
- 30) General Aviation-TAA, Transportation Facts and Trends, quarterly supplement, Jan. 1973, p. 16. Intercity passenger-miles.
- 36) Air Carrier-Sum of Certificated and Supplemental.
- 37) Certificated-CAB, *Air Carrier Traffic Statistics*, Dec. 1972, p. 1. Sum of revenue passenger-miles in scheduled service (line 11) and nonscheduled service (line 47), total domestic operations.
- 40) Supplemental-Ibid., Dec. 1972, p. 43. Total revenue passenger-miles in domestic operations.
- Water-TAA, Transportation Facts and Trends, quarterly supplement, Jan. 1973, p. 16. Intercity passenger-miles.
- 52) Air Carrier-Sum of Certificated and Supplemental.
- 53) Certificated-CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 7. Sum of revenue passenger-miles in scheduled service (line 11) and nonscheduled service (line 47). Total international and territorial operations.
- i6) Supplemental-Ibid., Dec. 1972, p. 43. Total revenue passenger-miles in international operations.

Figure 6: Ton-Miles, 1971

1) Total Transportation-Sum of Domestic and International.

- (2) Domestic-Sum of Highway, Rail, Air, Water and Pipeline.
- (3) International-Sum of Air Carrier and Water.
- (4) Highway Figure represents total ton-miles of intercity truck transport plus ton-miles of intercity bus. Local truck ton-miles are not available.
- (9) Truck Includes intercity truck only.
- (11) Intercity Truck-ICC, 86th Annual Report, 1972, p. 132. Figure includes the intercity common and contract motor carriers of property operating under ICC authority, plus the intercity tonmiles of all private trucks and for-hire trucks not subject to economic regulation by the ICC, plus intercity ton-miles of local ICC carriers.
- (12) ICC-Regulated Intercity Truck-ICC, 86th Annual Report, 1972, p. 133. The 1971 federally regulated percentage of total intercity ton-miles assumed equal to the 1970 percentage (40.5 percent).
- (13) Nonregulated Intercity Truck-*Ibid.*, 1972, p. 133. 1971 nonregulated percentage of total intercity ton-miles assumed equal to the 1970 percentage (59.5 percent).
- Bus-Rough estimate by National Association of Bus Owners for cargo ton-miles in 1972 is 60 million. An even rougher estimate for 1971 by the Office of Systems Analysis and Information is 55 million.
- (24) Rail-ICC,86th Annual Report, 1972, p. 132. Intercity ton-miles of all railroads and electric rail-ways, including express and mail.
- (29) Air-Air Carrier only.
- (36) Air Carrier-Sum of Certificated and Supplemental.
- (37) Certificated-CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 1. Revenue ton-miles of freight, express, U.S. and foreign mail in domestic operations, all services.
- (40) Supplemental-*Ibid.*, 1971, p. 35. Revenue ton-miles of freight and express in total domestic operations of the supplemental carriers. Supplemental carriers are ordinarily not authorized to carry mail.
- (43) Water-Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, 1971, Part 5, p. 123. Total domestic ton-miles.
- (51) Pipeline-ICC, 86th Annual Report, 1972, p. 132. Intercity ton-miles of oil pipelines.
- (52) Air Carrier-Sum of Supplemental and Certificated.

- (53) Certificated-CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 7. Revenue ton-miles of freight, express, U.S. and foreign mail in total international and territorial operations, all services of the certificated carriers.
- (56) Supplemental-*Ibid.*, Revenue ton-miles of freight and express in total international operations. Supplemental carriers are ordinarily not authorized to carry mail.

Figure 7: Number of Vehicles, 1971

- (1) Total Transportation-Sum of Domestic and International.
- (2) Domestic-Sum of Highway, Rail Air, Water, and Pipeline.
- (3) International-Sum of Air Carrier and Water.
- (4) Highway-Sum of Auto, Truck, and Bus.
- (5) Auto-Sum of Personal Passenger Car and Motorcycle.
- (6) Personal Passenger Car-Bureau of Public Roads, *Highway Statistics*, 1971, table MV-1, p. 32. This figure includes private and commercial vehicles (including taxicabs) as well as publicly owned vehicles for the 50 States and the District of Columbia.
- (7) Taxi-Data for Taxi are included in the Personal Passenger Car category.
- (8) Motorcycle-Bureau of Public Roads, *Highway Statistics*, 1971, table MV-1, p. 32. This figure is the sum of the private and commercial vehicles plus the publicly owned vehicles.
- (9) Truck-Ibid., 1971, table MV-1, p. 32.
- (14) Bus-Sum of Intercity Bus and School Bus.
- (15) Intercity Bus-NAMBO, Bus Facts, 1972, p. 24. This figure includes operations of Class I, II, and III carriers reporting to the ICC and intrastate carriers.
- (18) School Bus-Bureau of Public Roads, *Highway Statistics*, 1971, table MV-10, p. 35. For some States, church, industrial and other private buses are included: in other States, privately owned school buses could not be segregated from commercial buses and are included with the latter.
- (19) Local Transit-Sum of Motorbus, Trolley Coach, Surface Rail, and Subway and Elevated.
- (20 Motorbus-ATA, Transit Fact Book, '72-'73, p. 19. This figure does not include sightseeing buses or school buses.
- (21) Trolley Coach-Ibid., '72-'73, p. 19.
- (22) Surface Rail-Ibid., '72-'73, p. 19. This figures does not include commuter or suburban railroads.

- (23) Subway and Elevated-Ibid., '72-'73, p. 19.
- (24) Rail-AAR, Yearbook of Railroad Facts, 1972. This figure is the sum of passenger train cars, p. 53, freight cars, p. 50, and locomotive, p. 49, class I railroads.
- (25) Rail, Passengers-Ibid., 1972, p. 53. Passenger train cars, Class I railroads.
- (26) Rail, Cargo-Ibid., 1972, p. 50. Freight cars, Class I railroads.
- (29) Air-Sum of General Aviation and Air Carrier.
- (30) General Aviation-FAA, Statistical Handbook of Aviation, 1971, Table 8.2.
- (31) Business-Ibid., 1971.
- (32) Commercial-Ibid., 1971. This category includes air taxi, aerial application, and industrial/special.
- (33) Instructional-Ibid., 1971.
- (34) Personal-Ibid., 1971.
- (35) Other-Ibid., 1971.
- (36) Air Carrier-Sum of Certificated and Supplemental.
- (37) Certificated-Civil Aeronautics Board, Bureau of Accounts and Statistics. This figure represents owned aircraft, excluding those leased to others, plus aircraft leased from others, without regard to aircraft withdrawn from service for economic, mechanical, or technical reasons
- (40) Supplemental-CAB, Bureau of Accounts and Statistics.
- (43) Water-American Waterways Operators, Inland Waterborne Commerce Statistics, 1971, p. 2
 This figure represents the sum of self-propelled and non-self-propelled towing vessels and
 barges in the United States.
- (52) International Air Carrier-CAB, Bureau of Accounts and Statistics.

Figure 8: Number of Fatalities, 1971

- (1) Total Transportation-Sum of Domestic and International.
- (2) Domestic-Sum of Highway, Rail, Air, and Water.
- (3) International-Air Carrier only. Fatalities in international water transport not available.
- (4) Highway-National Safety Council, Accident Facts, 1972, p. 42. Includes deaths involvir mechanically or electrically powered highway transport vehicles in motion (except those o rails), both on and off the highway or street. Includes 10,600 pedestrians.

Figure 8: Number of Fatalities (cont.)

- (5) Auto-Sum of Personal Passenger Car, Taxi, and Motorcycle.
- (6) Personal Passenger Car-Ibid., 1972, p. 75. Passenger fatalities, passenger cars and taxicabs.
- (7) Taxi-Included in Personal Passenger Car.
- (8) Motorcycle-Ibid., 1972, p. 56. Fatalities of motorcycle.
- (9) Truck-Ibid., 1972. Truck occupant fatalities computed by subtracting, the sum of pedestrian, passenger car, taxi, and motorcycle fatalities from total highway fatalities.
- (14) Bus-Ibid., 1972, p. 75. Passenger fatalities of all buses (intercity, school, and local transit).
- (24) Rail-Ibid., 1972, p. 79. Includes fatalities of passengers on trains, employees on duty, other nontrespassers.
- (29) Air-Sum of General Aviation and Air Carrier. Includes fatalities of passengers, crew, and others.
- (30) General Aviation-Ibid., 1972, p. 76.
- (36) Air Carrier-Sum of Certificated and Supplemental.
- (37) Certificated-Ibid., 1972, p. 76.
- (40) Supplemental-Ibid., 1972, p. 76.
- (43) Water-Ibid., 1972, p. 74.
- (52) Air Carrier-Sum of Certificated and Supplemental. Includes passengers, crew, and others.
- (53) Certificated-Ibid., 1971, p. 76.
- (56) Supplemental-Ibid., 1971, p. 76.

Table 1: Average Passenger Revenue Per Passenger-Mile, 1961-1971

Certificated air carrier, domestic operations, scheduled service:

CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 1; Air Carrier Financial Statistics, Dec. 1971, p.1. passenger revenues divided by revenue passenger-miles.

Class I rail:

AAR, Yearbook of Railroad Facts, 1972, Total: p. 32; commutation: commutation passenger revenues (p. 11) divided by commutation passenger-miles (p. 30); other than commutation: sum of columns 3 and 4 (p.11) divided by column 2 (p. 30).

Class I intercity bus:

NAMBO, Bus Facts, 1972, p. 27.

Table 2. Average Freight Revenue Per Ton-Mile, 1961-1971

Certificated air carrier domestic operations, scheduled service: 1961-70: CAB, Handbook of Airline Statistics, 1971, p. 93. 1971: CAB, Air Carrier Financial Statistics, Dec. 1971; Air Carrier Traffic Statistics, Dec. 1972. Freight revenues divided by revenue ton-miles of freight.

Class I rail:

AAR, Yearbook of Railroad Facts, 1972, p. 31.

Class I intercity motor carriers of property, common and contract: ICC, Transport Economics, Feb.-March, 1973, p. 8.

Oil pipelines:

ICC, Transport Economics, Feb.-March, 1973, p. 8.

Classes A and B water carriers, barge lines operating on Mississippi River and tributaries:

1961-69: ICC, Transport Economics, Jan. 1971, p. 20. 1970-71: ICC, Transport Economics, Aug.-Sept., 1972.

Table 3: Average Fare

Certificated air carrier domestic operations, scheduled service: 1961-70: CAB, Handbook of Airline Statistics, 1971. Total passenger revenues (p. 210, line 3) divided by revenue passenger enplanements (p. 106, line 20). 1971: Total passenger revenues (CAB, Air Carrier Financial Statistics, Dec. 1971, p. 1., column 8, line 3) divided by revenue passenger enplanements (CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 1., column 12, line 17.)

Class I bus, intercity:

NAMBO, Bus Facts, various editions. Passenger revenue in regular intercity service divided by passengers carried in such service.

Local Transit:

ATA, Transit Fact Book, '72-'73, p. 11.

Class I rail:

AAR, Statistics of the Railroads of Class I, October 1972, p. 7. Commutation, line 20; other than commutation: line 21.

Table 4: Operating Revenues, 1961-71

Certificated air carriers:

1961-70: CAB, Handbook of Airline Statistics, 1971. Sum of overall operating revenues in total domestic operations (p. 210) and total international and territorial operations (p. 221); 1971: CAB, Air Carrier Financial Statistics, Dec. 1971, p. 1., column 4, line 17.

Table 4: Operating Revenues, 1961-71 (cont.)

Supplemental air carriers:

1961-70: CAB, Handbook of Airline Statistics, 1971, p. 69. 1971: CAB, Air Carrier Financial Statistics, Dec. 1971, p. 58.

Intercity bus, class I:

1960-67: ICC, 84th ICC Annual Report, 1970, p. 143: 1969-70: ICC, 85th ICC Annual Report, 1971, p. 127; 1971: NAMBO, Bus Facts, 1972, p. 25.

Local Transit:

ATA, Transit Fact Book, '72-'73, p. 9. Includes motorbus, subway and elevated surface rail, trolley coach.

Oil Pipeline:

TAA, Transportation Facts and Trends, quarterly supplement, Jan. 1973, p. 4.

Class I rail:

AAR, Yearbook of Railroad Facts, 1972, p. 9.

Class I intercity motor carriers of property:

ICC, 86th Annual Report, 1972, p. 137, and equivalent tables in earlier editions.

Water:

Classes A and B carriers, inland and coastal waterways: ICC, 86th Annual Report, 1972, p. 139, and equivalent tables in earlier editions.

Maritime carriers:

ICC, 86th Annual Report, 1972, p. 140, and equivalent tables in earlier editions.

Class A freight forwarders:

1960-67: ICC, 84th Annual Report, 1970, p. 151; 1968-1971: ICC, 86th ICC Annual Report, 1972, p. 133.

Table 5: Vehicle-Miles, 1961-71

Air carriers:

Certificated-CAB, Handbook of Airline Statistics, 1971, p. 106. Aircraft revenue miles in scheduled service (line 35) plus nonscheduled service (line 56); 1971: CAB, Air Carrier Traffic Statistics, December 1971, p. 1. Aircraft revenue miles in scheduled service (line 31) plus nonscheduled service (line 50). Supplemental-CAB, Handbook of Airline Statistics, 1971, p. 199; 1971: CAB, Air Carrier Traffic Statistics, (line 21), p. 43, Dec. 1972.

General Aviation:

FAA, Statistical Handbook of Aviation, Table 9.10, 1971.

Table 5: Vehicle-Miles, 1961-71 (cont.)

Highway:

Passenger car and taxi-FHWA, Highway Statistics, annual editions, table VM-1.

Truck-Same source as passenger car and taxi.

School bus-Same source as passenger car and taxi.

Intercity bus-NAMBRO, Bus Facts, 1972, p. 24, and equivalent table in 1970 edition.

Local Transit:

ATA, Transit Fact Book, 1972-73, p. 15.

Class I rail:

AAR, Yearbook of Railroad Facts, 1972. Freight train-miles, p. 37; passenger train-miles, p. 35.

Table 6: Passenger-Miles

Air carrier:

Certificated-CAB, Handbook of Airline Statistics, 1969 and 1971, p. 106. Sum of total domestic passenger-miles in scheduled service (line 11) and nonscheduled service (line 47); 1971: CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 1. Sum of lines 9 and 43. Supplemental-CAB, Handbook of Airline Statistics, 1971, p. 199; 1971: CAB, Air Carrier Traffic Statistics, Dec. 1972, line 4, p. 43.

General Aviation:

TAA, Transportation Facts and Trends, 1971, p. 16 and quarterly supplement, January 1973, p. 16.

Highway:

Passenger Car and taxi-FHWA vehicle-miles multiplied by a constant average occupancy of 2.2. Intercity bus-TAA, *Transportation Facts and Trends*, 1971, p. 16, and quarterly supplement, Jan. 1973, p. 16.

Class I rail:

AAR, Yearbook of Railroad Facts, 1972, p. 30.

Domestic water:

TAA, Transportation Facts and Trends, 1971, p. 16 and quarterly supplement, Jan. 1973, p. 16.

Table 7: Cargo Ton-Miles

Air carrier:

Certificated-CAB, Handbook of Airline Statistics, 1969 and 1971, p. 106. Sum of revenue ton-miles of freight, express, U.S. and foreign mail (lines 2, 3 and 4); 1971-CAB, Air Carrier Traffic Statistics, Dec. 1972, p. 1. Sum of lines 2, 3 and 4.

Oil Pipeline:

ICC, 86th Annual Report, 1972, p. 132 and equivalent tables in earlier editions.

Class I rail:

AAR, Yearbook of Railroad Facts, 1972, p. 27.

Table 7: Cargo Ton-Miles (cont.)

Motor vehicles:

ICC, 86th Annual Report, 1972, p. 132, and equivalent tables in earlier editions.

Inland waterways including Great Lakes:

ICC, 86th Annual Report, 1972, p. 132, and equivalent tables in earlier editions.

Total domestic waterways:

U.S. Army Corps of Engineers, Waterborne Commerce of the U.S., Part 5, 1971, p. 123.

Table 8: Basic Intercity Mileage Within the Continental United States, 1961-1971

Railroads, all line haul:

AAR, Yearbook of Railroad Facts, 1972, p. 46. Data represent aggregate length of roadway of all line-haul railroads, excluding mileage of yard tracks or sidings. Jointly used track is counted only once.

Oil pipelines:

American Petroleum Institute, Petroleum Facts and Figures, 1967, p. 122; TAA, Transportation Facts and Trends, quarterly supplement, April 1971, p. 31.

Inland waterways:

American Waterways Operators, Inland Waterborne Commerce Statistics, 1971, p. 1.

Highways:

For 1970: FHWA, *Highway Statistics*, 1970, table SM-2, p. 157. Total surfaced mileage of State primary and secondary roads and municipal extensions of such roads, less col. D-E mileage, plus total toll facility mileage, with Alaska and Hawaii mileage deleted. Earlier years from earlier editions of *Highway Statistics*.

Airways:

FAA, Statistical Handbook of Aviation, 1970, p. 11. Sum of col. 1 (low frequency), col. 2 (very high frequency, direct low altitude), and col. 5 (jet routes). The sum has been multiplied by 1.151 to convert nautical mileage to statute mileage.

Table 9: Number of Vehicles

Air carrier:

CAB, Bureau of Accounts and Statistics.

General Aviation:

FAA, Statistical Handbook of Aviation, table 8.2, 1971 edition.

Passenger car, taxi, and motorcycle:

FHWA, Highway Statistics, 1971, table MV-1, p. 32, and same table in earlier editions.

Intercity bus:

NAMBO, Bus Facts, 1972, p. 24.

Table 9: Number of Vehicles (cont.)

Local transit:

ATP, Transit Fact Book, '72-'73 P. 19.

Class I rail:

AAR, Yearbook of Railroad Facts, 1972, Locomotives, (p. 49), freight cars (p. 50), passenger cars, and pullman (P. 53).

Truck:

FHWA, Highway Statistics, 1971, table VM-1, p. 81, and same table in earlier editions.

Water vessels:

American Waterways Operators, Inland Waterborne Commerce Statistics, 1971, p. 2.

Table 10: Personal Consumption Expenditures by Transportation Sector, 1961-1971

U.S. Department of Commerce, Office of Business Economics, The National Income and Product Accounts of the United States, 1929-1965, table 2.6, 1966-1971 are from comparable tables in the July issues of "The Survey of Current Business".

Table 11: Personal Consumption Expenditures by Type of Product, 1961-1971

U.S. Department of Commerce, Office of Bureau Economics, The National Income and Product Accounts of the United States, 1929-1965, and 1966-1971 are from comparable tables in the July issues of "The Survey of Current Business".

Table 12: National Income by Transportation Sector

- U.S. Department of Commerce, Office of Business Economics, The National Income and Product Accounts of the United States, 1929-1965, and 1966-1971 are from comparable tables in the July issues of "The Survey of Current Business".
- Table 13: Average Annual Earnings Per Full-Time Employees by Transportation Sector, 1961-1971
- U.S. Department of Commerce, Office of Business Economics, The National Income and Product Accounts of the United States, 1929-1965, table 6.5. 1966-1971 are from comparable tables in the July issues of "The Survey of Current Business".

- Table 14: Average Annual Number of Full-Time and Part-Time Employees by Transportation Sector, 1961-1971
- U.S. Department of Commerce, Office of Business Economics, The National Income and Product Accounts of the United States, 1929-1965, table 6.3. 1966-1971 are from comparable tables in the July issues of the "The Survey of Current Business".

Table 15: Wages and Salaries by Transportation Sector, 1961-1971

U.S. Department of Commerce, Office of Business Economics, The National Income and Product Accounts of the United States, 1929-1965, table 6.2. 1966-1971 are from comparable tables in the July issues of "The Survey of Current Business".

Table 16: Fuel Consumption

Class I rail:

AAR, Statistics of Class I Railroads, 1961 - 1971, p. 15.

Air Carrier:

Civil Aeronautics Board, Bureau of Accounts and Statistics.

General Aviation:

FAA, Statistical Handbook of Aviation, 1971 draft edition.

Highway:

FHWA, Highway Statistics, 1971, table VM-1, p. 81, and same table in earlier editions.

Vessels:

Residual-API, Annual Statistical Review, April 1973, p. 48.

Distillate-Ibid., p. 44.

Gasoline-FHWA; Highway Statistics, 1971, table MF-24, p. 8, and same table in earlier editions.

Transit:

ATA, Transit Fact Book, '72-'73, p. 19.

APPENDIX B Glossary

GLOSSARY

Air Carrier

OPERATING REVENUES:

These revenues were taken from the performance of air transportation and related incidental services. Includes:

- (1) transport revenues from the carriage of all classes of traffic in scheduled and non-scheduled services including the performance of aircraft charters, which includes passenger, freight, express, mail, excess baggage, and other transport revenues.
- (2) nontransport revenues consist of Federal subsidy (where applicable) and incidental revenues, net revenues less related expenses from services incidental to air transportation.

CERTIFICATED ROUTE AIR CARRIERS:

One of a class of air carriers holding certificates of public convenience and necessity issued by CAB, authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations. This general carrier grouping includes the all-purpose carriers (i.e., the so-called passenger/cargo carriers) and the all-cargo carriers, and comprises all of the airlines certificated by the Board, except the supplemental air carriers. Certificated route air carriers are often referred to as "scheduled airlines," although they also perform nonscheduled service.

DOMESTIC OPERATIONS:

Effective January 1, 1970, in accordance with the new 50-States concept, the 50 States of the United States and the District of Columbia including operations between States separated by foreign territory or major ex-certificated trunk carriers and Pan American and the operations of the local service, helicopter, intra-Alaska, intra-Hawaii, domestic all-cargo and "other carriers" are classified under this operation. The other carriers classification now contains the territorial passenger/cargo category. In addition, any transborder operations conducted on the domestic route segments of U.S. air carriers are shown as domestic operations.

INTERNATIONAL AND TERRITORIAL OPERATIONS:

Effective January 1, 1970, in accordance with the new 50-States concept, those operations between the 50 States of the United States and foreign points, includes both the combination passenger/cargo carriers and the all-cargo carriers engaged in international and territorial operations.

SUPPLEMENTAL AIR CARRIERS:

One of a class of air carriers now holding certificates, issued by the CAB, authorizing them to perform passenger and cargo charter services supplementing the scheduled service of the certificated route air carriers. Supplemental air carriers are often referred to as "nonskeds," i.e., nonscheduled carriers.

OPERATING EXPENSES:

Expenses incurred in the performance of air transportation, which includes direct aircraft operating expenses and ground and indirect operating expenses.

AIRCRAFT REVENUE MILES:

The miles (computed in airport-to-airport distances) for each interairport hop completed, whether or not performed in accordance with the scheduled pattern. For this purpose, operation to a flag stop is a hop completed, even though a landing is not actually made.

SCHEDULED SERVICE:

Transport service operated over an air carrier's certificated routes, based on published flight schedules, including extra sections and related nonrevenue flights.

NONSCHEDULED SERVICE:

Revenue flights not operated in regular scheduled service, principally contract and charter operations.

REVENUE PASSENGER-MILE:

One revenue passenger transported 1 mile in revenue service. Revenue passenger-miles are computed by summation of the products of the revenue aircraft-miles flown on each interairport flight stage and multiplied by the number of passengers carried on that flight stage.

REVENUE PASSENGER LOAD FACTOR:

The percent that revenue passenger-miles are of available seat-miles in revenue passenger services, presenting the proportion of aircraft seating capacity that is actually sold and utilized.

REVENUE TON-MILE OF FREIGHT:

One short ton of freight transported 1 statute mile. Ton-miles are computed by summation of the products of the aircraft-miles flown on each interairport flight stage multiplied by the number of tons carried on that flight stage.

AIRBORNE SPEED:

Often called "wheels-off wheels-on speed." The average speed of an aircraft while airborne, in terms of great-circle airport-to-airport distance.

Highway

FEDERAL EXPENDITURES:

Federal expenditures equals the intergovernmental payments to the States, District of Columbia, and local governments plus direct expenditures for capital outlay, maintenance, administration, and research.

STATE AND LOCAL EXPENDITURES:

State and local expenditures equals the sum of disbursements for capital outlay, maintenance and traffic surfaces, administration, and research, highway law enforcement and safety, and interest on debt.

RURAL MILEAGE:

This mileage is computed from traffic on any roads outside the city municipal district or boundary.

STATE PRIMARY SYSTEM:

Bulletin and referred to highways that had been officially designated by States and the "primary system."

STATE SECONDARY ROADS:

Mileage for "State secondary systems" is reported in the tables from the States (taken from the *Highway Statistics 1970 Bulletin*) that have designated both a primary and a secondary system.

MUNICIPAL MILEAGE:

This mileage is computed from traffic on any road inside the city municipal district or boundary.

Automobile

EXPENDITURES:

These figures are assigned to the amount of money and time spent on the items listed in automobile profile.

REVENUES:

The income received from passengers in revenue services of a taxi.

VEHICLE-MILES-STREETS:

This distance covers the total number of miles (by millions) of a passenger car, taxi, and notorcycle on an average regular intracity route.

VEHICLE-MILES:

The vehicle-miles of an automobile are computed based on gasoline tax and the miles per sallon.

'ASSENGER-MILES:

This movement covers the total travel of passengers riding within a passenger car or taxi, the novement of 1 miles.

JRBAN STREETS:

The vehicle-miles traveled upon streets within municipal boundaries based upon the above lefinition (vehicle-miles).

IAIN RURAL ROADS:

The vehicle-miles traveled upon main thoroughfares leading into the metropolis.

OCAL RURAL ROADS:

The vehicle-miles traveled upon roads in the local vicinity of the suburban areas.

XPENDITURES:

us

These figures cover the total operation and maintenance, insurance, depreciation, operating each, licenses, and operating rents of school buses.

NTERCITY BUS:

This total equals Class I, II, and III carriers reporting to ICC and intrastate car carriers.

TERCITY BUS-CLASS I CARRIERS:

A Class I motor carrier of passengers is defined by the Commission as having average annual osss operating revenues of \$1,000,000 or more during interstate service.

VEHICLE-MILES OPERATED:

This term covers the total of miles during regular-route intercity service, local and suburban service, charter and special service.

COMMERCIAL BUS:

A motor carrier (coach) used to carry multiple passengers for a fare.

SCHOOL AND NONREVENUE BUS:

These motor carriers are used to carry multiple passengers without a fare for the destination carried.

REVENUE PASSENGER-MILES:

One revenue passenger transported 1 mile.

NUMBER OF REVENUE PASSENGERS:

The total number of passengers in revenue transportation services.

AVERAGE SPEED FOR COMMERCIAL BUS ON MAIN RURAL ROADS:

This average is the speed of free-flowing bus traffic along level sections of a highway.

LOCAL RURAL ROADS:

This mileage is taken from county road and towns and township road rural in character.

Truck

REVENUES:

The amount of which the carrier becomes entitled to receive for transportation and services incidental thereto.

ICC-REGULATED AND NON-ICC-REGULATED:

An ICC-regulated carrier is a truck company operating in interstate commerce under ICC authority for hire carrier. A non-ICC-regulated carrier is a private carrier hauling only for itself.

OPERATING REVENUES OF CLASS I INTERCITY MOTOR CARRIERS:

The amount of money which a carrier becomes entitled to receive or achieved to its benefit for transportation and services incidental thereto.

OPERATING EXPENSES OF CLASS I INTERCITY MOTOR CARRIERS:

This is the cost of truck operations by service functions.

VEHICLE-MILES:

This term covers miles operated by power units upon urban streets, main rural streets, and local rural roads.

TON-MILES:

The transportation of a ton of freight a distance of 1 mile.

AVERAGE LENGTH OF HAUL (MILES):

The total number of ton-miles divided by tons of revenue freight carried.

Local Transit

PASSENGER REVENUE:

Revenue from the transportation of passengers upon the basis of fares.

OPERATING REVENUE:

Passengers carried in revenue service of local motorbuses, subway and elevated, surface rail, and trolley coach services.

OPERATING EXPENSES:

This category includes all equipment, maintenance, wages, fuel, advertisement, taxes, licenses, insurance, rent, etc.

LINE MILEAGE:

This mileage is computed from point to point. It begins with mileage gained from leaving the garage on a regular route and ending back at the garage.

REVENUE VEHICLE-MILES:

Bus-miles represented as operated in revenue service.

SUBWAY AND ELEVATED:

These modes are classified as rapid rail transit.

SURFACE RAIL:

This mode is classified as a street car.

TROLLEY COACH:

Coach on rubber wheels but powered by a running overhead electrical wire.

Water Transport

DOMESTIC FREIGHT:

All commodities being shipped waterborne between points in the United States and its terrtorial waters (Puerto Rico and the Virgin Islands) consisting of bulk materials—grains, sugar, molasses, logs and lumber, coal and coke iron ore, iron and steel, sand, gravel, stone chemicals, and related products.

COASTWISE/COASTAL WATERWAYS:

These terms apply to domestic traffic receiving a carriage over the ocean, or the Gulf of Mexico, e.g., New Orleans to Baltimore, New York to Puerto Rico, San Francisco to Hawaii, and Puerto Rico to Hawaii. Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also termed "coastwise." The Chesapeake Bay and Puget Sound are considered internal bodies of water rather than arms of the ocean and therefore traffic confined to these areas is "internal" rather than "coastwise."

INTERNAL WATERWAYS:

This term applies to traffic between ports or landings wherein the entire movement takes place on inland waterways. Also termed internal are movements involving carriage on both inland waterways and waters of the Great Lakes; inland movements that cross short stretches of open waters which link inland systems, marine products, sand, and gravel taken directly from beds of the oceans, the Gulf of Mexico and important arms thereof; and movements between offshore installations and inland waterways.

LAKEWISE/GREAT LAKES:

This term applies to traffic between U.S. ports on the Great Lakes system. The Great Lakes system is treated as a separate system rather than as part of the inland system.

INTERNATIONAL FREIGHT:

All movements waterborne between the United States and foreign countries and between Puerto Rico and the Virgin Islands, U.S.A., and foreign countries are considered as international freight, consisting of: petroleum and products, coal and coke, iron ore, and iron and steel, grains, and chemicals.

DOMESTIC PASSENGER:

Any person traveling on a public conveyance within U.S. territorial waters.

INTERNATIONAL PASSENGER:

Any person traveling on a waterborne public conveyance between the United States and foreign countries and between Puerto Rico and the Virgin Islands, U.S.A., and foreign countries is considered an international passenger.

CLASS A AND CLASS B CARRIERS BY INLAND AND COASTAL WATERWAYS:

Class A water carriers are ones with an annual operating revenue above \$500,000. Class E water carriers have an annual operating revenue greater than \$100,000 but less than \$500,000.

MARITIME:

Those carriers engaging in waterborne trade in the same capacity as inland water carriers differing only in that maritime carriers commerce takes place on the sea.

MARITIME REVENUE:

Revenue received for the carriage of freight in international shipping and trade on oceans

NON-SELF-PROPELLED:

This term applies to vessels not containing within themselves the means for their own propulsion.

DRY CARGO BARGES AND SCOWS:

Both are large, flat-bottomed boats used to transport dry bulk materials; the scow is chiefly used for transporting sand, gravel, or refuse.

TANK BARGES:

This term applies to flat barges that travel on inland waterways, have no engine, and must be pulled by a towboat, and that usually carry fluid such as oil.

SELF-PROPELLED TOWBOATS AND TUGS:

This towboat is a compact shallow-draft boat with squared bow and towing knees for pushing tows of barges on inland waterways; and a tug is a strongly built boat used for towing and pushing, also termed as towboat. Both of these vessels have within their structure the means for their own propulsion.

TONS OF FREIGHT HAULED (MILLIONS):

This covers the total number of tons of freight hauled across domestic waterways carrying both imports and exports.

lailway

LASS I RAILROADS:

These railways have an annual operating revenue greater than \$5,000,000.

ASSENGER:

A person traveling on a train by right of fare or pass, or a person lawfully on the premises of carrier incidental to traveling on a train.

ASSENGER REVENUE:

Revenue from the transportation of passengers upon the basis of tariffs, including the carer's portion of through fares, extra fares on limited trains, additional railway fares for the exclusive se of space, mileage and script coupons honored, and revenue from the transportation of corpses.

OMMUATION:

Passenger traffic handled between designated points at less than the basic fare per trip. It oes not include traffic moving on basic rates of round trip, half rates, clergy, charity, military, pecial excursions, and other special-rated traffic.

THER THAN COMMUTATION:

Passenger traffic other than that handled between designated points at less than the basic re per trip. It does not include traffic moving on basic rates of round trip, half rates, clergy, narity, military, special excursions, and other special-rated traffic.

REIGHT REVENUE:

Revenue from the transportation of freight and from transit, stop, diversion, and reconsignent arrangements, upon the basis of tariffs.

AIL REVENUE:

Revenue from the transportation of mail at established rates, and for the services and facilies provided in connection with the handling of U.S. mail.

KPRESS REVENUE:

Revenue from transportation of express matter and from use of facilities on trains and at ations incidental to such transportation.

OTHER REVENUE:

A general heading on the income statement under which are grouped revenues from miscellaneous operations, income from lease of road and equipment, miscellaneous rent income, income from non-operating property, profit from separately operated properties, dividend income, interest income, income from sinking and other reserve funds, release of premium on funded debt, contributions from other companies, and miscellaneous income.

OPERATING EXPENSES:

Expenses of furnishing transportation service including the expense of maintenance and depreciation.

PASSENGER AND PULLMAN CARS:

Car units that provide areas for sitting and sleeping.

LOCOMOTIVES:

These are self-propelled units of equipment or combinations of units operated under a single control, and designed solely for moving other equipment.

LINE MILEAGE:

The miles run by a complete unit of all car equipment carrying freight or passenger a distance of 1 mile.

CAR MILEAGE:

The miles run by an individual car in a unit carrying freight or a passenger a distance of 1 mile.

TRAIN MILEAGE:

The miles run by a train in passenger or freight service.

LOCOMOTIVE MILEAGE:

The miles run by a locomotive in freight or passenger train service.

REVENUE PASSENGERS CARRIED:

Passengers who pay fares for transportation services.

REVENUE PASSENGER-MILE:

One revenue passenger transported 1 mile.

AVERAGE PASSENGER TRIP LENGTH:

Calculated by dividing the number of revenue passenger-miles by the number of passenge carried.

REVENUE TON-MILE:

The movement of 1 ton (2,000 pounds) of revenue freight a distance of 1 mile.

AVERAGE HAUL:

In applying to freight, it is the average distance in miles 1 ton is carried, computed t dividing the number of ton-miles by the number of tons carried, whether for an individual railway

or for a group of railways, in either case representing the haul per railway. For the United States as a whole, it is also computed by dividing the total ton-miles by the tons of freight originated, thus giving effect to the fact that some freight originates on one railway and reaches its destination on another.

Dil Pipeline

DPERATING REVENUES:

The amount of revenue a carrier is entitled to receive for transportation and services neidental thereto.

CC-REGULATED:

These carriers report to ICC all operating revenues, because of needed authority from ICC o operate in interstate commerce, if a pipeline crosses States or if a pipeline is receiving oil from nother State.

IONREGULATED:

These carriers are not required to report to ICC any revenues received for transportation and ervices because they do not engage in interstate commerce.

PERATING EXPENSES:

This is the cost of pipeline operation by service functions.

APPENDIX C

Selected Passenger and Cargo Performance Indicators by Mode of Transportation, 1961 and 1971

SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS BY MODE OF TRANSPORTATION, 1961 and 1971

	<u>1961</u>	1971
IR CARRIER		
Aircraft available for service per capita, Domestic and international operations, certificated route air carriers, all services	1.1 x 10 ⁻⁵	1.2 x 10 ⁻⁵
Revenue passenger-miles per capita		
Domestic operations		
Certificated, all services	172.8	532.4
Scheduled service	169.7	516.1
Non-scheduled service	3.1	16.3
International operations		
Certificated, all services	55.6	191.6
Scheduled service	47.9	141.7
Non-scheduled service	7.7	49.9
Revenue passenger-miles per aircraft Domestic and international operations, certificated route air carriers, all services	20.5 x 10 ⁶	62.5 x 10 ⁶
Available seat-miles per capita		
Domestic operations		
Certificated, all services	n/a	1,095.2
Scheduled service	306.5	1,074.1
Non-scheduled service	n/a	21.1
International operations	38,623 175	
Certificated, all services	n/a	338.3
Scheduled service	86.2	282.8
Non-scheduled service	n/a	55.2
Revenue ton-miles of freight ¹ per capita		
Domestic operations		
Certificated, all services	3.6	11.4
Scheduled service	2.6	10.6
Non-scheduled service	1.0	0.8
International operations		
Certificated, all services	1.6	10.7
Scheduled service	1.4	7.4
Non-scheduled service	0.2	3.3

¹ Excludes ton-miles of mail, express, excess baggage, and passengers.

Note: Per capita figures are based on 1961 and 1971 total resident populations of 182,992,000 and 206,230,000 respectively. (Excludes armed forces abroad.)

GENERAL AVIATION	1961	<u>1971</u>
Number of eligible aircraft per capita	4.4 x 10 ⁻⁴	6.4 x 10 ⁻⁴
Total number of miles flown per capita	10.2	15.2
Total number of miles flown per aircraft	23,042	23,972
Total number of hours flown per capita	7.4×10^{-2}	11.9 x 10 ⁻²
Total number of hours flown per aircraft	168.7	187.6
HIGHWAY		
Rural highway mileage per capita Under state control Under local control Under Federal control Total rural roads Municipal mileage per capita	3.6×10^{-3} 12.8×10^{-3} 0.6×10^{-3} 17.0×10^{-3}	3.5×10^{-3} 10.9×10^{-3} 1.0×10^{-3} 15.4×10^{-3}
Under state control	0.3×10^{-3}	0.4×10^{-3}
Under local control Total municipal mileage	2.1×10^{-3} 2.4×10^{-3}	2.5×10^{-3} 2.9×10^{-3}
Total rural and municipal mileage per capita	19.4 x 10 ⁻³	18.3 x 10 ⁻³
Rural mileage per auto registration Under state control Under local control Under Federal control Total rural roads	1.1 x 10 ⁻² 3.7 x 10 ⁻² 4.8 x 10 ⁻² 9.6 x 10 ⁻²	0.8×10^{-2} 2.4×10^{-2} 3.2×10^{-2} 6.4×10^{-2}
Municipal mileage per auto registration Under state control Under local control Total municipal mileage Total rural and municipal mileage per auto registration	8.5×10^{-4} 61.9×10^{-4} 70.4×10^{-4}	8.3 x 10 ⁻⁴ 55.6 x 10 ⁻⁴ 63.9 x 10 ⁻⁴
AUTOMOBILE	5.5 x 10 ⁻²	3.8×10^{-2}
Number of vehicle registrations per capita Passenger cars and taxis Motorcycles Vehicle-miles of travel per capita, passenger cars, taxis, motorcycles	34.6 x 10 ⁻² 0.3 x 10 ⁻²	44.9 x 10 ⁻² 1.6 x 10 ⁻²
Urban streets Main rural roads Local rural roads Total travel	1,607.7 1,281.6 438.5 3,327.8	2,546.7 1,568.1 507.0 4,621.8

AUTOMOBILE		<u>1961</u>	1971
Passenger-miles per capita, passenger cars			
and taxis, total travel		n/a	10,018.0
Vehicle-miles of travel per vehicle,			
passenger cars and taxis			
Urban streets		4,649.4	5,659.7
Main rural roads		3,706.3	3,484.8
Local rural roads		1,268.2	1,126.7
Total travel		9,623.9	10,271.2
Passenger-miles per vehicle,			
passenger cars and taxis	•	n/a	22,263.4
BUS			
Number of intercity buses per capita		1.12 x 10 ⁻⁴	1.13 x 10 ⁻⁴
Vehicle-miles per capita			
Commercial buses		15.6	14.0
School and non-revenue buses		8.5	10.7
All buses			24.7
All buses		24.1	21.1
Vehicle-miles per capita, all buses			
Urban streets		11.3	10.6
Main rural roads		8.2	8.5
Local rural roads		4.5	5.6
Total travel		24.0	24.7
Revenue passenger-miles per capita			
Total intercity bus		110.9	123.6
Revenue passenger-miles per vehicle			
Total intercity bus		9.9×10^{5}	10.9×10^{5}
TRUCK			
Number of twist registrations nor rehisle			
Number of truck registrations per vehicle Private and commercial		CO O 10-3	91.2 x 10 ⁻³
Federal		63.8×10^{-3} 0.5×10^{-3}	0.8×10^{-3}
		2.9×10^{-3}	4.0×10^{-3}
State, county, municipal Total		67.2×10^{-3}	96.0×10^{-3}
Vehicle-miles per capita, all trucks			
Urban streets		248.3	414.9
Main rural roads		342.5	530.4
Local rural roads		111.8	155.6
Total travel		702.6	1,100.9
Wahiala milas man tanah mada ta da da			
Vehicle-miles per truck registration		0.007.1	4 201 0
Urban streets		3,697.1	4,321.0
Main rural roads		5,099.4	5,523.6
Local rural roads		1,664.7	1,620.2
Total travel		10,461.2	11,464.8
Intercity ton-miles per capita		1,617.6	2,085.0

LOCAL TRANSIT	<u>1961</u>	1971
Revenue vehicle-miles per vehicle		
Motor bus	31,218	27,986
Subway and elevated	42,421	43,689
Surface rail	29,645	26,694
Trolley coach	25,856	29,701
Total transit	129,140	128,070
Revenue vehicle-miles per capita	0.4	C 7
Motor bus	8.4° 2.1	6.7 1.9
Subway and elevated	0.4	0.2
Surface rail	0.5	0.2
Trolley coach	11.4	9.0
Total transit	11.4	3.0
Number of vehicles per capita		
Motor bus	26.8×10^{-5}	23.8 x 10 ⁻⁵
Subway and elevated	4.9×10^{-5}	
Surface rail	1.3×10^{-5}	
Trolley coach	1.9×10^{-5}	
Total transit	34.9 x 10 ⁻⁵	29.4×10^{-5}
WATER TRANSPORT		
111111111111111111111111111111111111111		
Ton-miles per capita, domestic water		
Coastwise	1,709.8	1,746.6
Internal	482.3	782.3
Lakewise	355.2	340.8
Local	9.4	6.0
Total	2,556.7	2,875.7
Domestic deep sea ton-miles per capita	1,382.6	1,212.2
Tons of freight hauled per capita,		
domestic water		
Coastwise	1.2	1.2
Internal	1.7	2.3
Lakewise	0.7	0.7
Local	0.5	0.4
Total	4.1	4.6
CLASS I RAILROADS		
D		
Revenue passenger-miles per capita	22.5	21.5
Commutation	22.5 88.3	12.0
Other		33.5
Total	110.8	აა.ე
Revenue passenger-miles per passenger car	7.6×10^{5}	9.2×10^5
Revenue ton-miles per capita	3,078.6	3,586.9
Revenue ton-miles per freight car	2.9×10^{5}	5.2 x 10 ⁵

CLASS I RAILROADS		
	<u>1961</u>	<u>1971</u>
Number of vehicles per capita		
Freight cars	8.8×10^{-3}	7.8×10^{-3}
Passenger cars	0.2×10^{-3}	0.1×10^{-3}
Locomotives	0.2×10^{-3}	0.1×10^{-3}
Total	9.2×10^{-3}	8.0×10^{-3}
OIL PIPELINE		
Intercity ton-miles per capita, regulated		
plus non-regulated pipelines	1,517.6	2,426.3
Intercity ton-miles per mile of line,		
regulated plus non-regulated lines	1.4×10^6	2.0×10^6
Tons of petroleum transported per capita	2.6	3.9

2,413.4

3,687.0

Tons of petroleum transported per mile of line

BIBLIOGRAPHY

Accident Facts, National Safety Council, Chicago, Illinois.

Air Carrier Financial Statistics Civil Aeronautics Board, Washington, D.C.

Air Carrier Traffic Statistics, Civil Aeronautics Board, Washington, D.C.

An Analysis of Oil Outflows Due to Tanker Accidents, U.S. Coast Guard, Washington, D.C.

Annual Report to Congress, Interstate Commerce Commission, Washington, D.C.

Automobile Facts and Figures, Automobile Manufacturers Association, Detroit, Michigan.

Bus Facts, National Association of Motorbus Owners, Washington, D.C.

Government Expenditures for Air, Highway, and Waterway Facilities, Association of American Railroads, Washington, D.C.

Handbook of Airline Statistics, Civil Aeronautics Board, Washington, D.C.

Highway Statistics, Department of Transportation, Federal Highway Administration, Bureau of Public Roads, Washington, D.C.

Inland Waterborne Commerce Statistics, The American Waterway Operators, Inc.

The National Income and Product Accounts of the United States, U.S. Department of Commerce, Office of Business Economics, Washington, D.C.

Report by the Committee on Motor Vehicle Emissions, National Academy of Sciences, February 15, 1973.

Statistical Handbook of Aviation, Department of Transportation, Federal Aviation Administration, Washington, D.C.

Statistics of Railroads of Class I, Association of American Railraods, Washington, D.C.

Transit Fact Book, American Transit Association, Washington, D.C.

Transportation Facts and Trends, Transportation Association of America, Washington, D.C.

Transportation Noise and Its Control, U.S. Department of Transportation, June, 1972.

Transport Statistics, Interstate Commerce Commission, Washington, D.C.

Waterborne Commerce Statistics of the United States, U.S. Army Corps of Engineers, New Orleans, Louisiana.

Yearbook of Railroad Facts, Association of American Railroads, Washington, D.C.